



Cannabis Legalization and Potential Impacts on Nepali Economy and Public Health

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ABSTRACT

After sustained pressure from the United States and the United Nations, Nepal enacted the Narcotics Drugs (Control) Act of 1976, banning licensing of cannabis dealers and farmers, and declaring cultivation of cannabis unconstitutional. The United States has now legalized cannabis for recreational use in 15 states and two territories, while >40 countries have legalized cannabis for medical use. Nevertheless, Nepal still legally bans cannabis, which has symbolic cultural value as well as economic and medical benefits. Farmers would likely benefit from its legalization. Employment opportunities, tourism, and government revenue would increase. The trade deficit of the country can be reduced by exporting cannabis. The rising public support for the legalization of cannabis has resulted in the recent submission of a bill for its consideration in the Nepal parliament. This study provides a comprehensive analysis of the status of cannabis in Nepal, including its history and potential positive impacts if it is made legal.

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1. Introduction

For thousands of years, Nepal has been a home for medicinal and herbal plants, including *Cannabis sativa* L. The country has a long history of cannabis production to facilitate Ayurvedic medication, as an intoxicant, and as homage to the Hindu god Shiva (Gautam, 2018). In Nepali and Sanskrit languages, the cannabis plant and its extracts are known as “ganja,” and the crushed forms of marijuana in its edible and smoked forms are “charas” and “bhang” (Sherpa, 2019). For many centuries, cannabis has been consumed in Nepal as part of Ayurvedic healing, an ancient medical system based on the concept of harmonious functioning of body, mind, and spirit. The consumption of bhang has long been associated with the Maha Shivratri festival and other festivities involving Shiva. However, the ancient Veda texts assert caution about bhang; as Shiva used bhang for self-purification and self-mastery, “mere mortals should refrain from even attempting” its consumption (Potnis, 2020).

Cultivation and trading of cannabis was a lucrative source of income for centuries. As Nepal is favored with suitable climatic conditions and fertile land, cannabis can be grown at different altitudes across the country. In the mid-1960s, the legendary cannabis-oriented “Hippie Trail” led to Nepal. Tourism flourished as many visitors came to Nepal to consume cannabis (Figure 1), and the cannabis-based economy boomed. Selling

cannabis in shops was legal, and Kathmandu’s “Freak Street” became an epicenter for hippies.

Everyone benefited from the legality of cannabis production, marketing, and consumption, including the government, farmers, and businessmen. A good example of a typical Nepali cannabis entrepreneur during this era was a seventh-grade dropout. He had a talent for making tomato sauce, but it required much time and efforts, both preparing and selling it on a bicycle for a small profit margin. Therefore, he utilized his familiarity with marijuana from his rural upbringing and established the Eden Hashish Center in Kathmandu. He also launched a cannabis export business and soon contributed to Nepalese cannabis becoming globally popular. The entrepreneur was not only a pioneer of the drug trade, but also contributed to tourism promotion in Nepal. After the prohibition of cannabis in Nepal, he left for India (Gautam, 2018).

In 1973, Nepal canceled the licenses of all cannabis shops, dealers, and farmers. Its legalization ended after the enactment of Narcotics Drug Control Act of 1976 (Sharma, 2015). The immediate effects of the cannabis ban were calamitous. Nepal lost a significant amount of revenue; tourism and cannabis trading declined severely, and farmers lost a major cash crop. Following the enactment of the Narcotics Drug Control Act, cannabis can only be consumed during the festival of Maha Shivaratri. According to Section 4 of the Act, “No person shall cultivate, consume or trade cannabis. The person, acting in violation of the prohibitions laid down in section 4 clause (a), shall be punished according to the gravity of offense.”

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Nevertheless, illicit cultivation and consumption has continued. Activists continue to strive for cannabis legalization. Because Nepal is an agricultural country, legalization of cannabis would provide economic opportunities for farmers and agricultural entrepreneurs, as cannabis can be a robust cash crop.

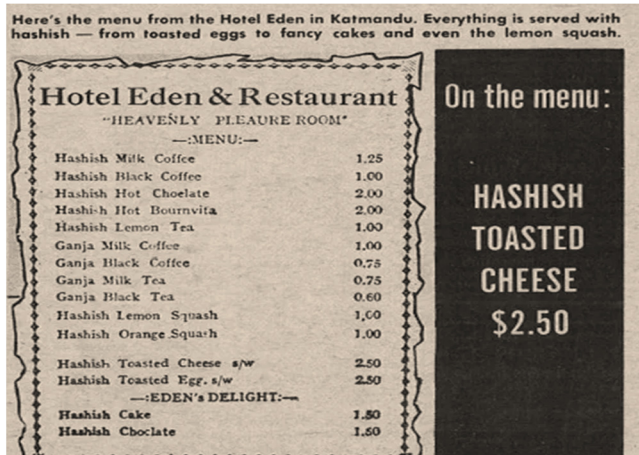


Figure 1. Food menu for the Hotel Eden & Restaurant, Kathmandu, 1971.

Although marijuana consumers and legalization activists believe using cannabis has no negative impacts, research has shown that cannabis can render significant physical, social, mental, and psychological implications in human life. The degree of its possible negative impact on human life depends on the quantity of consumption, product quality, and overall health of the individual. Continuous consumption of cannabis since an early age may lead to adverse growth conditions in adolescence, including reduced bone density and increased risk of bone fractures (Sophocleous et al., 2017). Several researchers have found that the children born to mothers who consumed cannabis during her pregnancy exhibit neurological problems (Hasin, 2017). Therefore, legalization of cannabis must also consider stricter regulatory guidelines to ensure public safety and responsible use.

2. Cannabis Farming in Nepal

Before the cultivation of cannabis was banned in Nepal, it was farmed for centuries because it required less labor compared to other crops and provided a sustained income. Despite legal concerns, cannabis has become a crop of choice among many struggling farmers. Its production has been flourishing in the Terai region, albeit illegally, through direct investment provided by Indian drug traders (*The Rising Nepal*, 2020). Many poor farmers have become prey to the drug traders.

Cannabis can be classified into two types (marijuana and hemp) based on the concentration of cannabinoids in the plant. Marijuana produces >0.3 THC (tetrahydrocannabinol) and low CBD (cannabidiol) amount, whereas hemp produces <0.3% THC and high CBD amounts (Aryal et al., 2019). Studies show that both types were grown widely in Nepal before its prohibition. The marijuana type cannabis was used mostly for the medicinal, recreational, and spiritual purposes, whereas the hemp type was used mostly for industrial purposes such as making bags, ropes, and fibers as well as a source of green manure or green mulch. Hemp fabric is stronger, more absorbent, and has better insulation against heat and cold than cotton (Sherpa, 2019). Cannabis is still cultivated in some parts of the

country, mostly in the Terai and remote regions where it is difficult for authorities to locate producers. For example, cannabis cultivation was so common in the Parsa district before 2011 that it financed elections, weapon purchases, and marriage dowries, and 60% of cultivable land grew poppies and cannabis, with trading guarded by Indian drug traders (Sharma, 2015). Nevertheless, thousands of kilograms of cannabis are seized annually, indicating that the Nepal's narcotic law has not been implemented effectively. For instance, 4.7 metric ton of ganja was seized from cross-border drug traders in the fiscal year 2019-2020 alone (Narcotics Control Bureau, 2020).

3. Rationale for Cannabis Legalization in Nepal

3.1. Medicinal Benefits

The medical use of cannabis is debatable, although some of its demonstrated medicinal uses include pain management, reduction of inflammation in conditions such as Crohn's disease and rheumatoid arthritis, treating certain neurological disorders, and sleep management (Cherney, 2020). The plant extract has been known for its analgesic properties (Bouie, 2019). The cannabis produces more than 480 secondary metabolites of which more than 100 cannabinoids are unique to the cannabis plant (Aryal, 2019). Secondary metabolites, particularly cannabinoids, THC, CBD, CBN (cannabinol), and others are now being actively researched for their medicinal properties. While several THC-based preparations containing the major psychoactive ingredient of cannabis have shown benefits such as alleviating nausea from chemotherapy and the pain and spasticity associated with conditions like multiple sclerosis, paucity of information exists on the long-term impact of its use by people with health- and/or age-related vulnerabilities (National Institute of Health, 2020). Traditionally, Ayurvedic practice recommended using cannabis only in minute amounts, and only with other treatments such as additional herbs, in order to counterbalance what were perceived to be potential mind and spirit altering properties of cannabis, such as laziness, pessimism, and self-indulgence (McConaghay, 2014).

3.2. Economic Benefits

Cannabis legalization could potentially help improve the rural economy. The UN Convention on Narcotic Drugs states that cannabis containing less than 0.3% THC is not considered a drug; rather, it can be a source of fiber, paper, confectioneries, cosmetics, oil, and furniture (Adhikari, 2019). If cultivation, consumption, and trading of cannabis, both psychoactive and in hemp form, are legalized, the earnings can be a great source for the government in the form of cannabis tax. Government can levy tax based on parameters such as percentage of price, weight, or potency (*i.e.*, THC level). Many U.S. states where cannabis is legalized are taking full economic advantage (Fig. 1). The global legal cannabis market is predicted to be \$146.4 billion by 2025 (Mahat, 2019).

The residents of Western Nepal were living a more prosperous life prior to the ban, with a stable income through export of hashish and ganja (Aryal, 2019). They had created a market for rope, fiber, and traditional clothing made from cannabis plants. However, economic stability collapsed after the announcement of the 1976 cannabis ban. Many farmers lost the major cash crop of that time and became considerably less subsistent. Nepal lost significant revenue, although efforts were made to alleviate this economic crisis through crop substitution (Booth, 2003). Had cannabis continued to be legal, many cannabis industries would have been established, leading to

an increase in GDP. In addition, Nepal spends a large amount of money importing allopathic drugs every year. If the country legalizes cannabis and the cannabis-based medicinal system is revived, Nepal could reduce trade deficit and enhance economic growth (Aryal, 2020). Several cannabis products named after strains claimed to be from Nepal are sold in pharmacies in the U.S. (Aryal, 2019). If legalized in Nepal and research be allowed, Nepal may be able to claim intellectual property rights (IPR) to several strains that were illegally taken away from Nepal.

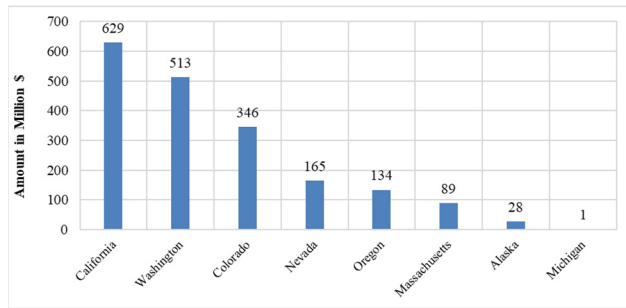


Figure 2. Tax revenue (in million USD) from sale of recreational marijuana trade in the United States (Conway, 2020).

3.3. Employment Opportunities

Legal marijuana has provided employment and economic growth opportunities in the U.S., with over 9,000 licenses for farm producers, manufacturers, dispensaries, transporters, and laboratories (Paudel, 2020). If cannabis is legalized, many Nepali farmers would likely alter their farm enterprise by incorporating cannabis as a cash crop. In addition, cannabis industries, dealers, and laboratories would provide employment opportunities and help alleviate outmigration of youth to foreign countries.

3.4. Improved Trade Deficit

Mahat (2019) stated, “Nepal is losing out on a great opportunity to top up its dwindling [foreign exchange] reserves because of the government’s reluctance to legalize cannabis” to emphasize the need for cannabis legalization in Nepal vis-à-vis current international trade imbalance. Historically, marijuana cultivated in Nepal was popular in the U.S., Thailand, Malaysia, Hong Kong, India, and many other countries. Since the flavor and composition of Nepali cannabis is unique, consumer demand for Nepali cannabis is expected to be very high compared to that from other countries. As a result, Nepali cannabis farmers would have a sustained international market and a stable farm enterprise.

Besides cannabis in its psychoactive form, there is a highly promising market for exports of hemp-based products expressing indigenous Nepali craft traditions. Hemp textiles from Nepal are popular overseas due to their quality, comfort, and unique environmental and health attributes (Sherpa, 2019).

3.5. Tourism Promotion

For countries that have legalized cannabis, cannabis tourism has become one of the major platforms for tourist attraction. During the 1970s, hippies did not visit Nepal merely for the consumption of cannabis but to enjoy the vastness of country’s natural beauty and cultural sites. Tourism started to flourish as cannabis assisted in drawing foreigners to the country. After the

ban, Nepal lost significant share of international tourists. Legalizing cannabis could be beneficial in terms of tourism promotion and increasing foreign reserves. However, today’s legalization of cannabis may not have the same effect in attracting foreign tourists as in 1970s because of the entirely different generations and dramatic change in world affairs 50 years later. Cannabis may be more attractive to tourists for medicinal use rather than for tourism and recreational purpose (Adhikari & Shiwakoti, 2020). Further research in tourism marketing and planning, taking advantage of changes since the 1970s such as the internet, would facilitate implementing cannabis tourism responsibly.

3.6. Reduction in Crime Rate

If cannabis is legalized, illegal drug dealing activities would likely diminish, along with drug-related arrests and lawsuits. Violence associated with illicit trading is expected to decline. Thus, it is hypothesized that the decriminalizing cannabis would reduce drug-related criminal acts (Sophocleous et al., 2017).

4. Legalization Movement in Nepal

The global movement for cannabis legalization has significantly influenced the public sphere in Nepal in recent years, emanating relentless efforts in its support from various sectors. Several current members of parliament continue to emphasize the possible economic expansion of the nation from cannabis legalization, production, and exports that meet demand for medical application. They filed a motion in parliament in January 2020 for legalization of cannabis (Budhathoki, 2020). Another petition was filed in the parliament to promote and regulate cannabis farming and production (*The Record*, 2020). The bill would not only legalize cannabis but also allow for commercial production of cannabis. Features of the bill include:

4.1. Terminating the blanket ban on marijuana

The new regulation seeks to cease the current blanket ban on the cultivation, consumption, and trading of cannabis. It also clears the way for the medical use of cannabis. Nepal would effectively restore the laws as of the 1970s, but this would be supplemented by strict measures to prevent the abuse of cannabis. About 75% of cannabis consumption among Nepalese is by people under 30, and about 25% of users report that peer pressure - a salient issue in adolescence and young adulthood - is a major reason for consumption (Narcotics Control Bureau, 2020). Therefore, comprehensive planning for counseling and guidance of youth is of paramount importance.

4.2. Farmers need to obtain licenses

Farmers would need to acquire licenses from District Agriculture Knowledge Centers to practice cannabis cultivation on their farms. Farmers would not be permitted to cultivate cannabis on their entire land to ensure that other food crops are also produced.

4.3. Formation of a marijuana board

An agency would be formed under the control of the federal government to issue licenses and develop policies for the promotion of cannabis. The board will also oversee the cultivation and sale of cannabis.

4.4. Selection of farming zones

The government would determine areas eligible for the cultivation of cannabis and publish a list in the Nepal *Gazette*. Areas where farming other crops is less feasible would get priority, such as rugged hilly terrain and marginal lands.

4.5. No license to minors

No one under 18 would be licensed to cultivate and/or sell cannabis.

4.6. Cannabis to be exported

Preference would be given for the export of cannabis. Licensed farmers would be able to export cannabis as well as its by-products.

4.7. Prohibition on advertising and branding of cannabis products

Advertising of cannabis would be restricted like that of alcohol. However, hemp products such as garments, fibers, bags, oil, and honey can be advertised. The cannabis industry would be subjected to higher taxation than other cash crops.

5. CONCLUSION

In Nepal, cannabis has a long history of use both for medicinal purposes and as part of cultural traditions. Notwithstanding this storied history, cannabis cultivation and usage remain illegal and punishable by severe penalties such as prison. Nepal's climate and diverse ecology are well suited for cannabis cultivation. Nepal has a significant potential to become a major producer of cannabis and could achieve many benefits from its legalization. Farming, industry, and government will all benefit from cannabis legalization in Nepal. The economy and GDP will improve, tourism will be promoted, and the standard of living will be enhanced. However, the question of the negative impacts of cannabis legalization remains a concern. All the possible downsides of legalization should be cataloged and considered, and reasonable steps should be followed to monitor the role of cannabis in Nepalese society. The United States, which led the effort to a worldwide ban of cannabis in 1970s and effectively pressured Nepal to ban cannabis in 1976, has already legalized it across its various states. Therefore, the agreement of 1976 must be revisited by Nepal and adjust its policies based on the changing policies on cannabis worldwide. The global market for cannabis is expanding and Nepal can play a significant role in this sector.

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