

From ban to brand—Changing scenario of Mahua (*Madhuca longifolia*, *Madhuca indica*) in India and become the fulcrum for tribal communities

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Copyright © 2024 by author(s). Probe - Plant & Animal Sciences is published by Universe Scientific Publishing. This work is licensed under the Creative Commons Attribution (CC BY) license. https://creativecommons.org/licenses/ by/4.0/ Abstract: Mahua is undergoing a rebranding, but India needs legislation to safeguard tribal rights. Mahua is entwined with the tribal world, yet incorrect colonial ideas about it as a toxic, lowly beverage still plague it. Mahua has a close relationship with Gond, Santhal, Baiga, Munda, Ho, Orao, and all other communities dispersed across at least 12 states. For instance, the social rites of Tonda (birth), Manda (marriage), and Konda (death) for a Gondi Adivasi would end in the absence of mahua. Mahua brewing was merely one more duty in an indigenous family's home until the late 1800s. The British Raj considered this to be an unexplored source of income. With a series of laws, including the Bombay Abkari Act of 1878, the Mhowra Act of 1878, 1892, the Madhya Pradesh Excise Act of 1915, the Bihar and Orissa Excise Act of 1915, and the Government of India Act of 1935, they outlawed not only the production of mahua but also the gathering and storing of mahua flowers. They considered it a low-quality toxicant and labelled it as a threat to public health and morality. As a result, they could regulate the production of regional spirits and made money from the importation of alcohol from Germany and Britain. Following India's independence, regulations changed but not entirely. Mahua and tribal people were affected by laws such as the Bombay Mahua Flower Rules of 1950, the Bihar Prohibition and Excise Act of 2016, the PESA of 1996, the Forest Right Act of 2006, and total prohibition, which included mahua distillation, which was enforced in Gujarat and Wardha in 1960. The average family in the Indian states of Maharashtra, Madhya Pradesh, and Jharkhand will make 10.5 K, 16.4 K, and 15.75 K ₹ annually. Mahua is included in the minimum Support Price by the Indian government. Mahua has an estimated potential production of 1.5 lakh MTs, valued at 122 ₹ Cr, in India; however, only 1.0 lakh MTs, valued at 81 ₹ Cr, are expected to be collected annually. Though there is a 1.63 lakh job potential, just 28.6 K, or 17.5%, of Indians are employed. Mahua appears to be gradually reclaiming its space after going extinct for decades. The British Raj previously outlawed mahua; today, it is one of India's most prestigious brands, sold all over the world.

Keywords: Mahua acts; minimum support price; prohibition; tribal

1. Introduction

The forested plains of western, central, and eastern India are home to an abundance of mahua trees, or *Madhuca longifolia*. According to Suryawanshi and team study conducted at 2021, tribes have historically used flowers, fruits, branches, and leaves for food, fire, cattle fodder, art, medicine, and even cash to barter for grains [1]. They have also honoured it with colourful folk festivals, poetry, and music. Every stage of Adivasi's life and every rite revolves around Mahua. The Gonds call themselves Koyatur. It is said by some that Koya Pen, the first Gond, was born beneath a Koya (mahua) tree. Many tribes consider the kalpavriksha to be nature's reward. Gonds commemorate Chaitrai Mahaparv in Chaitra, the first month of the Indian lunar

calendar [2]. With the arrival of the new year comes the green light to indulge in all the seasonal mainstays, including mango, mahua flowers, char, and tendu. It makes sure that Gonds wait to consume a fruit until it is fully ripe and its seeds have had time to grow into saplings. Mahua trees are handed down to the following generation instead of being cut down. The yield increases with tree age. It so makes financial sense to preserve it. In the barter economic system, mahua has a place [3]. For example, it's typical to see Adivasis paying for veggies with bags of flowers throughout Chhattisgarh. Over the past ten years, there has been a notable shift in the Indian government's perspective towards the native tribal product known as mahua. The Mahua tree yields a wide variety of products, including vegetable butter, syrups, purees, spirits and medicinal extracts. Tribal pickers gather the blossoms and seeds of this plant, which is essential to their way of life in many parts of India, from the jungles. The mahua, also known as the oil-nut tree (Madhuca longifolia, Madhuca indica), is a tropical forest native to much of central and southern India. Tribal tribes living in forests use it to manufacture a wide range of goods, from syrups and medicinal extracts to jams. Mahua is a strong, aromatic beverage that is typically made in small, disorganized backyard stills. It is a locally produced alcoholic beverage that makes up very little of the excise revenue. To give it an extra "kick," it is often boosted with other hazardous substances, a practice that has resulted in a number of tragic country liquor-related deaths. Mahua flowers, which are pale green blooms that fall from surrounding trees and cover the forest floor, are a frequent sight in the Indian forest region. Mahua is referred to as the "Tree of Life". In the dry forest regions of the central Indian highlands and the adjacent Chota Nagpur Plateau (CNP), the mahua flowering season begins at the end of March. The air fills with the sweet scent of pale yellow mahua flowers that cover the ground beneath the tree canopy [4]. Many products are produced by the Mahua tree, such as vegetable butter, purees, syrups, alcohol, and derivatives used in medicine. Its fruits and blooms are picked by a variety of tribal people from the forested areas; this is a significant source of revenue in various regions of the nation. The most well-known native alcoholic beverage in India is mahua [5]. It's also the only spirit in the world made from fragrant flowers. However, colonial identity and strict laws have prevented conventional beverages from entering the mass alcohol market [6]. The mahua tree is a staple food for the Adivasi community and grows mostly in the central and eastern plains of India. It has been used for more than a century. A major cash crop, mahua is collected for its bark, seeds, and flowers (fresh for wine, dried for preserves). Nonetheless, a fermented pot-still refined alcohol is the most widely used use [7].

The term "Minor Forest Produce" is used by the Indian government to refer to a wide range of various goods that fall within the category of "non-timber forest products of plant origin" but are difficult to classify [8]. This broad word refers to everything that is gathered (not harvested) by communities living in forests, such as bamboo, honey, forest wax, and medicinal herbs. This includes mahua flowers and seeds, which are harvested from India's woods rather than being cultivated; they are subject to several laws and regulations [9]. Mahua has a close relationship with Gond, Santhal, Baiga, Munda, Ho, Orao, and all other communities dispersed across at least 12 states. For instance, the social rites of Tonda (birth), Manda (marriage), and Konda (death) for a Gondi Adivasi would end in the absence of mahua. Without it, an Adivasi

society's milieu is fractured. What was once their cultural identity now fades away like a cheap spirit, tarnished by associations with immorality, adultery, danger, and other negative things. This was not an ordinary demotion; rather, it was a calculated effort by the British to take advantage of the Indians. Although the beverage and its blossoms were a part of everyday tribal life for generations, they were outlawed by the British during colonial authority and have only recently come back into fashion [10]. Mahua flowers were in short supply, which led to the covert and frequently tainted manufacturing of alcohol. This served the British Raj's objective of regulating indigenous spirits. Early nationalists and temperance activists frequently attacked alcohol. Mahuwah notes that even drinks like mahua, which were so vital in the life of many tribal people, were clubbed together as problematic due to boycotts and picketing of alcohol outlets, as well as the insistence of some nationalists that alcohol was 'foreign' to India [11]. It reveals the character of the Indian elites who came of age after independence, and who held the native ways of life in the highest regard. It ultimately produced a large amount of uniform, substandard products that helped to mould the Indian spirits market [12]. In opposition to the socio-political canvas's legacy, it would take a few influential business voices to reposition mahua as a premium craft spirit and work to amend excise laws to start lifting alcohol prohibitions [13].

It's interesting to note that the traditional social and economic norms persisted in India even after its independence in 1947. Like the former colonial rulers, the state continued to have a strong relationship with the monopoly on the manufacturing and sale of alcohol, and mahua was subject to strict regulations. Their goal was served by this quality drop, which increased the money from imported German and British booze and funded military operations. Because mahua was viewed as a cheap, "dangerous" beverage, tribespeople were not allowed to produce it or sell it outside of customary marketplaces [14]. For indigenous households, making mahua liquor was merely another duty around the turn of the 19th century. The British Raj considered this to be an unexplored source of income. The aftermath of colonialism persists. Mahua has enormous potential, and practitioners and academics who understand its history, cultural value, and economic importance for the Adivasis are calling for a policy change. Current excise laws in India divide alcohol into three categories: country liquor (CL), imported liquor (IL), and Indian Made Foreign Liquor (IMFL). CL is constrained by the outdated regulations of 1878 and 1892, which prohibit Adivasis from producing it above a certain threshold and prohibit non-Adivasis from consuming it or producing it. To fully realize its potential, a new category called "heritage spirits" and thoughtful policy formulation is highly recommended. The expanding global passion for foraging wild foods has brought attention to a variety of treasures once again [15]. Not to mention the Indian Butter Tree blossom, which is most recognized for being the main ingredient in Adivasi whisky. The mahua tree, a rich source of food and medicine that is revered, talked about, and ceremoniously conserved, has long been significant to several native and rural Indian communities.

2. Material and methodology

Researching the laws and regulations governing mahua in India is crucial before

delving into the creation of alcoholic and non-alcoholic mahua products. For indigenous households, making mahua liquor was merely another duty around the turn of the 19th century. The British Raj considered this to be an unexplored source of income. However, because of earlier actions in India, mahua has some secondary views in Indian society in the twenty-first century. I made an effort to emphasize many features of mahua to date, particularly in India, during my study.

2.1. Indian approach towards mahua

In this study, we assessed the strategies of India's leading mahua-producing states. We discussed important price states in India throughout this, including Madhya Pradesh, Jharkhand, and Maharashtra. Every state has its own mahua promotion programme and initiative programme. We have surveyed the effects of mahua on tribe members and those connected to mahua.

2.2. Act related to Mahua—Pre-independence of India (before 1947)

For Indian tribes like the Santhal, Gond, Munda, and Oraon, which use their varied components for food, fire, art, medicine, and cow fodder, the mahua tree is essential. Interestingly, mahua gained notoriety for the wine that was made from it. Mahua manufacture was outlawed during the British Raj because of alleged hazards; as a result, the Bombay Abkari Act of 1878 and the Mhowra Act of 1892 were passed. These regulations made it illegal for tribes to produce alcohol or gather mahua blossoms. Such statutes as the Government of India Act of 1935, the Madhya Pradesh Excise Act of 1915, the Bihar and Orissa Excise Act of 1915, the Bombay Abkari Act of 1878 and 1892. Several initiatives in India voiced opposition to British rule, including the Temperance Movement of 1906 and the Indian National Congress's Prohibition Movement, which aimed to provide tribal people with some benefits from mahua.

2.3. Post-independence act related to Mahua

Following the independence of India, it was supposed that British rule would stop and decisions favouring tribal people would be made, but this did not occur. Rules such as the Bombay Mahua Flower Rules of 1950, the Bihar Prohibition and Excise Act of 2016, the Gujarat and Wardha prohibition laws of 1960, the PESA of 1996, and the Forest Right Act of 2006 attempted to modify laws, but they did not provide much assistance to tribal people. However, because of alterations in societal attitudes toward mahua, it is now acknowledged globally. Not only did it boost demand for alcohol, but also for food products. The government has implemented many measures and advertising activities to acknowledge the mahua.

2.4. Government support and platform for tribals in India

The promotion of the mahua and tribal economy is supported by the Indian government through a variety of programmes, perks, and plans. The largest efforts include the establishment of the Ministry of Tribal Affairs (TRIFED) in 1987 and the Tribal Co-Operative Marketing Development Federation of India Limited. Mahua, or minor forest produce (MFP), is included in the minimum support price (MSP). Tribal

economies are boosted by programmes like the Self-Self-Group idea and the launch of the VanDhan Yojana.

2.5. National & international market for mahua

Both the potential for and actual creation of jobs were examined in this study. The cooperation of the Tribal Co-operative Marketing Development Federation, a co-operative affiliated with IIT Delhi and operated by the Ministry of Tribal Affairs, was mentioned. Maharashtra, Madhya Pradesh, and the Jharkhand Forest region were chosen for this study's experimental investigation. Initiatives, rules, regulations, and policies from the Indian federal and state governments are examined and contrasted. Various markets were assessed to map Mahua's current state and positioning in sales and marketing. The multipurpose Indian forest tree Mahua (*Madhuca indica syn. Bassia latifolia*) is well-known for its tasty and nutritious blooms, not because it has valuable timber (which is hardly ever cut). For cultural and commercial purposes, it is regarded as one of the most valuable trees in the Central Indian tribal region.

3. Result and discussion

3.1. Indian approach towards Mahua

Mahua is considered a sacred beverage for Adivasis and, when correctly distilled, is among the best liquors in the world. Mahua flowers have a high sugar content (68%– 72%) along with several other minerals. Historians claim that the British colonists intended to use these laws to advance their own goals of importing alcohol to take control of the Indian spirit's market. Following India's independence, the government maintained the majority of the severe alcohol prohibitions put in place by the British. There was no reason to create an artisanal version because indigenous people could not sell the liquor they made from flowers. Instead, they continued to gather flowers. Mahua has had trouble finding its way into Indian liquor cupboards. First of all, it's still called a "country spirit," a word that dates back to the British era and was used to characterize native beverages. Local beverages were viewed as lower class, and production was tightly controlled, while imported alcohol was seen as superior. Second, the manufacturing of mahua is restricted and in certain states even policed; these states include Gujarat and Bihar. Because of this, a lot of this is done in complete secret or in a way that gets around regulations. We surveyed tribal areas in Maharashtra and Madhya Pradesh and discovered that mahua flowers have been used for a variety of purposes since ancient times. The mahua blossom in the images displayed in Figure 1.



Figure 1. Mahua flowers picture.

Those with family members employed in cities only use allopathic medicine to address common ailments like parasite infections and stomachaches. The majority of tribal people address common health conditions with mahua flower-based home treatments, as shown in **Figure 2**.



Figure 2. Use of medicines for the treatment of cough, stomachache, a parasitic disease.



Figure 3. Utilization of mahua flower-based remedies by women to cure milk production & menstrual cycle issues.

The study's most significant survey was one on women. This demonstrated that, in tribal populations, >94% of lactating women used natural remedies derived from mahua flowers to regularize or increase milk production during lactation periods, and >86% of women and girls used mahua flower-based natural remedies to treat menstrual cycle-related issues (**Figure 3**).

It was surprising to find during the study that a surprising percentage of blood pressure patients in tribal settlements, as shown in **Figure 4**, use allopathic medication. throughout the blood pressure patient interviews, it was discovered that the usage of allopathic medicine has increased throughout the past ten years.



Figure 4. Preferences of treatment for blood-pressure problem by tribals.

To draw attention to it, government hospitals also give away free tablets. However, the proportion of women who use mahua-based therapies for blood pressure problems is still higher than average. Mahua flowers are also used to cure libido loss, liver disease, and other conditions. However, because there are government facilities and free care available, the utilization is declining daily.

3.2. Act related to Mahua—Pre-independence of India (before 1947)

Different laws and regulations were enforced on India by the British government through acts. This will affect the sale of marijuana and its use in the manufacturing of food and alcohol. We have examined several acts both before and after Indian independence in our study. As seen in **Figure 5**, the principal 04 Acts of pre-independence India were implemented to limit mahua.



Figure 5. Acts related to Mahua before Indian independence.

Mahua was despised by colonists under the British Raj (1858–1877) in India as an intoxicating drug that jeopardized moral principles and human health. Additionally, its patrons were portrayed as savage, rural outlaws. Congress sought complete prohibition in the United Provinces, Central Provinces, Bihar, Madras, and Bombay in 1935. The two main goals of British legal regulations were to generate revenue and prevent intoxication to protect morals. Farmers in the majority of rural areas who make spirits from Mahua flowers were granted monopoly rights. However, there were drawbacks to the alcohol policy, including revenue losses because the levy was on the tapping of palms rather than the production of alcohol, which allowed for widespread evasion at all stages of production and sale, flooding the market with inexpensive illicit alcohol.

3.2.1. Bombay Abkari Act, 1878

Mahua production was outlawed during this legislation, along with the gathering and keeping of mahua flowers. Mahua flowers are included in the Bombay Abkari Act of 1878 as an intoxicating substance. As a result, they could regulate the production of regional spirits and made money from the importation of alcohol from Germany and Britain. Grant of License for Liquor Manufacture is stated in this Act. intended to dissuade fermentation and homebrewing. Mahua alcoholic beverages will only be made in central distilleries. Excise duty was imposed before distilleries were cleared. No Toddy may be sketched without authorisation. Everywhere the old farming system was replaced, there was a great deal of unhappiness and demonstrations against these harsh measures.

3.2.2. Mhowra Act, 1878

In 1878, the British government introduced this act. This rule forbade tribes from producing alcohol and from gathering mahua flowers. The British government's stance regarding the production and consumption of alcohol by Indigenous people serves as a clear example of the extent to which the colonial state intruded upon what might be referred to as the private, communal sphere.

3.2.3. Mhowra Act, 1892

In 1892, the English government implemented this act in India. Another name for the Indian Council's Amendment of 1892 was Lord Cross's Act. In India, this act is seen as the start of parliamentary democracy. The principal issues addressed by the 1892 changes approved by the British Parliament were the structure, authority, and duties of the Indian Legislative Councils. Prohibitions and laws, such as the Mhowra Act of 1892, were passed to restrict its use and distillation. The legislation forbade both the actual gathering of mahua flowers and their distillation into alcohol. In 1882, the Bombay Legislative Council established this ordinance in an attempt to curb clandestine manufacturing that resulted in "loss of Abkari Revenues" and "lawlessness" in areas with a high concentration of Mahua trees. This statute prohibits the selling and gathering of Mahua flowers within the Bombay Presidency. "Liquor traffic is a legitimate source of liquor revenue," said Charles Pritchard.

3.2.4. Madhya Pradesh Excise Act, 1915

This statute forbids the import, export, or transportation of mahua or any other base used in the production of alcoholic beverages. The British government declared it to be a low-grade toxin, classified it as a danger to morality and public health, and passed the Bombay Abkari Act in 1878. The issuance of licenses to producers, distilleries, and storage facilities for alcoholic beverages. Male and female employees under the age of 21 are prohibited from working in the spirits manufacturing industry. selling of alcohol to anyone younger than 21 is prohibited. Ban on advertising Excise taxes on import, export, and booze manufacturing are collected Penalties and confiscation for breaking the act's restrictions.

3.2.5. Bihar and Orissa Excise Act, 1915

limitations on import, export, and transportation under this statute. This deals with manufacturing licenses. Additionally, it prohibits drawing Tari in regions that have been alerted. This statute permits the construction of warehouses and distilleries with excise commissioner approval. excise charge levied and the cost price of national spirits fixed.

3.2.6. Government of India Act, 1935

The province government was granted the authority to control the production and sale of alcoholic beverages, not the federal government. Excise duties on the following commodities produced or manufactured in the province, along with countervailing duties at the same or reduced rates on comparable goods produced or manufactured elsewhere in India, are outlined in the Seventh Schedule, List II, Entry 40. Intoxicating spirits and narcotic medicines, that is, their manufacturing, distribution, procurement, and sale, are covered under Seventh Schedule, List II, Entry 31.

3.2.7. Government of India Resolution dated 7 September 1905

The Indian government believes that providing for the requirements of individuals who consume alcohol in moderation is vital and has no intention to meddle in their personal choices. However, their established objective is to reduce the temptation for abstainers and to prevent overindulgence in alcohol use. To this end, all income reasons must be completely subordinated. The best way to advance this policy is to tax alcohol as much as is practical without inadvertently encouraging illegal consumption to the point where it would rise rather than fall and without pushing people to substitute harmful drugs for alcohol or a more or less harmful form of spirits.

3.2.8. Temperance movement 1906

The people of South Gujarat and Thane launched a temperance movement to protest the heavy taxes imposed by the British. They encouraged group abstinence from alcohol. M.K. Gandhi's Anti-Liquor Campaign: Legislation supporting prohibition, attempts to refute the money-generating argument and the claim that "Liquor revenue is a form of extremely degrading taxation"

3.2.9. Prohibition movement by Indian National Congress

Congress sought complete prohibition in the United Provinces, Central Provinces, Bihar, Madras, and Bombay in 1935. Mahatma Gandhi supported national prohibition, and many Indian women did too. Men who drink less and commit less violence against women are the result of prohibition in the Indian states that have adopted the policy.

3.3. Post-independence Act related to Mahua

Following India's independence, the democratic parliament in India gained authority and control. However, mahua limits remained unchanged. Following the parliament's ongoing examination process, several adjustments have taken place, and mahua is now being promoted as a national treasure. The evolution of the deed is seen in **Figure 6**.



Figure 6. Development in act related to mahua after independence of India.

3.3.1. Bombay Mahua Flower Rules 1950

The Bombay Mahua Flower Rules of 1950 were first changed by Maharashtra, allowing the lawful collecting, sale, and transportation of mahua flowers. Note a significant, positive shift in government views and policies around a native tribal product that was previously considered a "dangerous blight" that needed to be eradicated in the last decade. These guidelines may be referred to as the 1950 Bombay Mhowra Flowers Rules. Mahaua was once strictly prohibited by the government, but today it is celebrated as a national liquor of India. Mahua went from being a confined crop to one that is actively pushed by governments all across India in the enigmatic methods of the economy. Maharashtra made it legal to harvest, trade, and transport mahua flowers when it amended the Mumbai Mahua Flower Rules in 1950.

3.3.2. Total prohibition, including Mahua distillation, is imposed in Gujarat and Wardha—1960

Prohibition was in effect in Bombay State from 1948 to 1950 and again starting in 1958. A sumptuary rule that prohibits the production, distribution, and use of alcoholic beverages is currently in effect in Gujarat. The Act came into effect on May 1, 1960, the day Bombay State was divided into the states of Gujarat and Maharashtra. Gujarat state still adheres to the Bombay Prohibition Act of 1949, although Maharashtra has a licensing system that grants licenses to retailers and vendors. The only state in India that has the death sentence for producing and selling homemade alcohol that causes fatalities is Gujarat. The Bombay Prohibition (Gujarat Amendment) Act, 2009 is the name of the law. Methyl alcohol intake has been linked to multiple deaths, which is what triggered the legislation.

3.3.3. Bihar Prohibition and Excise Act, 2016

Thus, on 2 October 2016, the Bihar Prohibition and Excise Act, 2016 was notified. Its preamble states that the purpose of the act is to "enforce, implement, and promote complete Prohibition of spirits and intoxicants in the territory of the State of Bihar and for matters connected therewith or incidental thereto." The traditional drink known as mahua liquor is made primarily to support the native forest people of Bihar. The mahua flowers used to produce these drinks are deeply ingrained in the customs of tribal tribes all over the nation. For-profit, hand-picked petals are sold to dealers who are not Adivasis. Occasionally, they need to be bought back at drastically high costs in order to brew alcohol for celebrations or leisure, to barter, to utilize as food or cattle feed, or to gift to ancestor spirits. For many populations, the flower is essential since its sales support daily life prospects. State excise laws, which forbid the Adivasi group from selling the alcohol they make, also regulate the sale of mahua. Many reasons have been given for this prohibition, such as the intention to increase the visibility of IMFL, divergent opinions regarding addiction and prohibition, political repression on the land, and even institutionalized discrimination. Residents are only allowed to use five litres for personal use. These restrictions are rigorously enforced by arrests and detentions. Figure 7 mentions the spirit process in Bihar.



Mixing of Mahua Flowers with Jaggary & Water

Natural distillation of liquor process

Local marketing of liquor on street market

Figure 7. Process of liquor in Bihar.

3.3.4. PESA, 1996

The Government of India passed the Provisions of the Panchayats (Extension to Scheduled Areas) Act, 1996, also known as the PESA Act, to provide self-governance for the people residing in India's Scheduled Areas through the use of traditional Gramme Sabhas. Despite the fact that the Panchayat now owns mahua due to the Forest Rights Act of 2006 and PESA of 1996, the Excise still places limitations on the herb's unrestricted commerce. Although the minimum purchase price is set by the panchayat, dealers still have a lot of influence over it. One of the main issues with enterprise governance that needs to be addressed is the lack of adequate facilities for marketing, finance, processing, and storage. The effects of PESA on the various states and activities are listed in **Table 1**. "Yes" in the table indicates that the PESA Act applies to that area.

Table 1.	. Impact	of PESA,	1996 on state.
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State name	Land acquisition	Excise	Forest produce	Mines & minerals	Agri produce market	Money leading
Maharashtra	No	No	Yes	No	No	No
Madhya Pradesh	Yes	Yes	No	Yes	Yes	No

State name	Land acquisition	Excise	Forest produce	Mines & minerals	Agri produce market	Money leading
Chhattisgarh	Yes	Yes	No	Yes	Yes	Yes
Jharkhand	No	No	Yes	No	No	No
Himachal Pradesh	Yes	Yes	Yes	Yes	No	No
Odisha	No	Yes	Yes	Yes	No	Yes
Rajasthan	No	No	No	Yes	No	Yes
Andhra Pradesh	No	No	No	No	No	No
Gujarat	No	Yes	No	Yes	Yes	Yes

Table 1. (Continued).

3.3.5. Forest Right Act, 2006

The Forest Rights Act (FRA), 2006, affirms the rights of traditional forest residents and tribal communities to forest resources, which these populations relied upon for a range of necessities, including housing, a means of subsistence, and other sociocultural requirements. The global forest status snapshot of India is depicted in **Figure 8**.



Figure 8. The snapshot of India's forest position in the world.

The Forest Rights Act of 2006 and the PESA (Panchayat Extension to Scheduled Areas) Act of 1996 have given the forest inhabitants the legal authority to own and manage the MFP. Only "forest-produce" is defined in Section 2(4) of the Indian Forest Act 1927, and this phrase refers to goods that are either brought from or found in forests, including bark, lac, mahua flowers, mahua seeds, kuth, caoutchouc, catechu, wood-oil, resin, and natural varnish. To put it briefly, a product must either be discovered in or be brought from a forest in order to qualify as a forest crop.

3.4. Government support and platform for tribals in India

A distinct emblem for the Indian government programme about the welfare of tribal people, as indicated in **Figure 9**.



Figure 9. Different logos related to tribals and Indian government initiatives for the welfare of tribals.

The exempt laws about mahua flowers remain antiquated and unclear. There is potential for additional misunderstanding when it comes to the use and transit of mahua flowers within and between states because different states have distinct sets of laws. Because of this, attempting to start a new business is difficult for everyone, even for unsuspecting tribal flower collectors and entrepreneurs. It is necessary to amend the policy to facilitate economic dealings while simultaneously preventing the exploitation of the tribal people and defending their rights, interests, and dignity. Mahua is finally here, but the legal system needs to change to make room for it and to encourage its growth. For tribal development, the government established organizations such as the Tribal Co-Operative Marketing Development Federation of India Limited Ministry of Tribal Affairs, Govt. of India (TRIFED), which initiated programmes such as the self-help group, Van Dhan Yojana, minimum support price (MSP) for Minor Forest Produce (MFP), and much more. The National Mahua Conclave, the first of its type hosted by the MP government on September 30, 2023, signified the culmination of all these activities. By fostering entrepreneurship and facilitating the connection between potential customers and tribal flower collectors, it advanced the cause of mahua. The Madhya Pradesh (MP) government's excise and tribal affairs ministry published a notification in 2022 authorizing the manufacture of mahua liquor under the designation of "heritage liquor". They began by testing the market by giving it away for free to patrons of MP Tourism Corporation-owned hotels and restaurants.

It made its debut on the market in May 2023. According to the Madhya Pradesh government, only the Scheduled Tribe Self-Help Groups in the state are authorized to commercially distil mahua spirit. Women have to make up 50% of these groupings. This artisanal spirit is made in small batches in two districts of Madhya Pradesh, Alirajpur and Dindori, by the Bhilala tribe of Kavcha village and the Gond tribe of Bhaka Mal village, under the brands Mond and Mohulo, respectively. The MP government's policy approach is noteworthy since it validates the traditional knowledge of the tribes, aids in its commercialization, and legitimately grants the

ability to do so exclusively to those tribes who have historically engaged in distillation. "The MP government's policy move is a bold step towards creating a positive air around Mahua to dispel its false association with hooch, poisoning, and death." Entrepreneurs Desmond Nazareth and Conrad Braganza debuted an IMFL brand of mahua spirit in 2018 as a tribute to India's interior and a nod to tribal customs and lore. The Andhra Pradesh government approved their attempt to produce mahua spirit as a non-domestic liquor due to policy limitations. They also expanded into other goods made from mahua flowers, which will aid in dispelling the myth that mahua is a cheap, poisonous liquor. However, only a small portion of the central Indian tribal belt saw the benefits of such initiatives. Adivasis, for instance, still carry the burden of a colonial worldview regarding mahua in the villages of West Bengal. Here, mahua flowers are becoming less expensive as well, mostly due to the availability of less expensive tampered alcohol. Though there is still a long way to go, the mahua cause has undoubtedly begun to take the first timid steps towards regaining its prestige. And for it to occur, there must be consistency in India's legal system. The exempt laws pertaining to mahua flowers remain antiquated and unclear. There is potential for additional misunderstanding when it comes to the use and transit of mahua flowers within and between states because different states have distinct sets of laws. This makes it difficult for anyone to start a new business, from entrepreneurs to unsuspecting tribal flower collectors. In addition to making doing business easier, the policy needs to be modified to prevent tribal people from being taken advantage of and to uphold their rights, interests, and dignity. Mahua is finally here, but the legal system needs to change to make room for it and to encourage its growth.

3.4.1. TRIFED—Government of India's Biggest Initiative

Under the Multi-State Cooperative Societies Act, of 1984, the Indian government established the Tribal Co-Operative Marketing Development Federation of India Limited Ministry of Tribal Affairs, Govt. of India (TRIFED) in August 1987 as a national cooperative body under the administrative supervision of the Ministry of Welfare of India. Its primary goal was to institutionalize the trade of Minor Forest Produce (MFP) and Surplus Agricultural Produce (SAP), which the tribal people of the country collected and cultivated. The "The Scheduled Tribes and Other Traditional Forest Dwellers (Forest Rights Act of 2006) is a significant piece of forest legislation that was passed to ensure the protection and means of subsistence for impoverished tribal people as well as their rights to land and other natural resources. TRIFED's MSP for the MFP & VanDhan programme is compliant with this legislation.

3.4.2. Minor forest produce (MFP)

The Union government has announced the addition of 17 new minor forest products (MFP) to the minimum support price programme, even as it frantically attempts to correct its rural agenda. The scheme's new MFP consists of dried Mahua flowers, dried Tejpatta, and dried Kokum. The statement was made on 27 December by the Ministry of Tribal Affairs, which also increased the MSP of MFPs that have been a part of the programme since 2013. **Table 2** lists the government of India's minimum support price as well as the incentive plan. For the weakest segments of society, the MFP economy is essential. In addition, **Table 3** lists the significant MFPs based on their potential for collecting in addition to their significance for subsistence.

Name of MFP	Minimum Support Price as Govt. of India (₹ per Kg.)	Incentive (Bonus) Wages given by State Govt. along with MSP Collection Rate (₹ per Kg.)	Minimum Support Price + Incentive (Bonus) Wages (₹ per Kg.)
Mahua flower dry (<i>Madhuca</i> longifolia)	30	-	30
Mahua seed (<i>Madhuca</i> longifolia)	29	-	29

Table 2. The minimum support price as the government of India and incentive plan.

Table 3. Indian estimated production of mahua vs. estimated collection potential per year.

Commodity	Estimated production	potential	Estimated collection potential		
	Qty in Lakh MTs	Value in Rs Crores	Qty in Lakh MTs	Value in Rs Crores	
Mahua flower	1.5	122	1	81	
Mahua seed	1	110	0.5	55	

3.4.3. Van Dhan Yojana

Throughout the nation, VanDhan Vikas Karyakram has been implemented with success. The nationwide programme aims to turn tribal gatherers into businesses and provide them with a means of subsistence. In primarily wooded tribal districts, this entails the establishment of Van Dhan Vikas Kendras (VDVKs) controlled by the tribal community.

3.4.4. Self-self-group concept & mahua

The strategy includes increasing the tribal people's capacity through sensitization, the creation of Self-Help Groups (SHGs) and training them to carry out specific tasks, investigating marketing opportunities in both domestic and foreign markets, establishing avenues for the sustainable marketing of tribal products, and building a brand. The government of Chhattisgarh is assisting and motivating self-help groups of tribal women to make and sell food items such as halwa, biscuits, and mahua laddoos.

3.5. National & International market for mahua

In certain regions, mahua flowers are utilized as readily convertible money, and throughout the gathering season, they are regularly sold to generate revenue for basic food necessities. The majority of tribal people—more than 75%—are involved in mahua flower collecting. Women and children are the main flower collectors on both revenue and forest properties. **Table 4** mentions that the Mahua collection creates jobs. Mahua is a significant income source for tribal people. The average family in the Indian states of Maharashtra, Madhya Pradesh, and Jharkhand will make 10.5 K, 16.4 K, and 15.75 K \gtrless annually as mentioned in **Table 5**. The Tribal Co-operative Marketing Development Federation, a Ministry of Tribal Affairs-run cooperative, collaborated with IIT-Delhi (as shown in **Figure 10**) to introduce mahua cookies mixed with millet flour in Madhya Pradesh and create Mahua Nutra, a health drink prepared by combining unfermented mahua flowers with pomegranate and guava juices in Jharkhand.



Figure 10. Collaboration of Ministry of tribal affairs and IIT Delhi.

Items	Peoples	Percentage employment
Potential employment	163,000	100%
Actual Employment	28,600	17.5%

Table 4. Employment opportunities via mahua.

Table 5. Income of tribals from mahua.

Average sales	Per family	Rate/kg	Income (₹)
Maharashtra	350	30	10,500
Madhya Pradesh	410	40	16,400
Jharkhand	450	35	15,750

In 2021, the Agriculture and Processed Foods Export Development Authority brought the world's attention to India's most well-known product, kacchi sharab (country liquor), when it shipped dried mahua flowers from the Korba district of Chhattisgarh to Paris. NGOs and private companies have contributed more to the branding of Mahua than has any one government action. Mahua mixes, developed by spirit businesses such as MahSpirit and DJ Mahua, are becoming more and more popular worldwide as specialty spirits brands for sophisticated consumers. Dehydrated Mohua flowers from Chhattisgarh and Himalayan goat meat from Uttarakhand were made available for export to France and the United Arab Emirates, respectively, thanks to the assistance of the Agricultural and Processed Food Products Export Development Authority (APEDA). The Mohua flower was processed by an APEDA-registered enterprise after being gathered from forests in the Korba district of Chhattisgarh. The Madhya Pradesh (MP) government's excise and tribal affairs ministry published a notification in 2022 authorizing the manufacture of mahua liquor under the designation of "heritage liquor." They began by testing the market by giving it away for free to patrons of MP Tourism Corporation-owned hotels and restaurants. The MP government's policy approach is noteworthy since it validates the traditional knowledge of the tribes, aids in its commercialization, and legitimately grants the ability to do so exclusively to those tribes who have historically engaged in distillation.

4. Conclusion

For Indian tribes, drinking mahua was forbidden when the British Raj took over, despite the fact that the principal ingredient grew on an abundance of trees throughout the nation and was a routine part of daily life for them. Now, mahua is resurfacing despite ongoing official prohibitions. Mahua trees, sometimes referred to as the "Tree of Life" by tribes like the Santhal, Gond, Munda, and Oraon, offer alcoholic beverages as just one of their offerings. It is widely distributed throughout large parts of India, and its fruits, flowers, leaves, and branches are used for a variety of things, including fuel, cash, medicine, and cow feed. Families and tribes all over India engaged in this centuries-long practice, producing and marketing mahua liquor up to the middle to late 1800s. Then, as part of their effort to increase their financial share by bringing in foreign alcoholic substitutes, MPs during the British Raj decided it was a threat to morality and public health. Legislation about the beverage restricted the number of flowers that may be collected and stored and outlawed the distillation of the flowers. Two such acts were the Mhowra Act of 1892 and the Bombay Abkari Act of 1878. Mahua production continued despite these prohibitions, as is frequently the case with prohibition. But it did imply that the quality of the product declined. When the drink was produced, extra foreign ingredients were added because mahua flowers could not be kept in storage. Lawmakers protested the drink more and more as additional foreign ingredients were added, calling it a harmful intoxicant and giving imports of alcohol precedence. Mahua flowers are used extensively to make spirits; hence the Bombay Prohibition Act 1949 & Bombay Mahua Flowers Rules 1950 regulate the trade in these flowers. Tribals were permitted to store up to 25 kg of mahua due to regulations, but non-tribals were only permitted to store up to 5 kg. Moha may only be collected for legitimate household purposes. Over the past few years, local governments and organizations have gradually begun to adopt a different mindset. For instance, the Madhya Pradesh government designated mahua as a heritage liquor in 2021, while the Maharashtra state government modified its antiquated legislation to permit the gathering and preservation of the blooms by indigenous tribal communities. In that same year, dried mahua flowers, picked by the tribal people from Chhattisgarh's woods, were delivered to France for the first time by the Agricultural and Processed Food Products Export Development Authority, a government agency. Mahua is entwined with the tribal world, yet incorrect colonial ideas about it as a toxic, lowly beverage still plague it. Mahua Spirits is undergoing a rebranding, but India needs legislation to safeguard tribal rights. Mahua prohibitions are being lifted in some states, but nationwide prohibitions would make distillers' business much more viable.

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