



IP, SME AND TRADITIONAL KNOWLEDGE: REVIVING OUR TRADITIONAL MEDICINE

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ABSTRACT

Intellectual Property is essential for protecting traditional medicine, but its value is not appreciated. Big corporate entities have realised its importance, while SMEs must use traditional knowledge to protect it and survive competition. Canada and the US have decriminalized the use of medicinal marijuana. The Narcotics and Psychotropic Substances Act 1985 has made marijuana illegal, limiting its medicinal uses in the public domain. Traditional knowledge has been sacred for centuries, making it difficult to claim medicinal use of it. This article highlights the importance of Intellectual Property Rights and how they can be an economic tool and discusses certain challenges faced by SMEs and why they must invest in them to get long-term returns in the future. Furthermore, this article analyses, why laws relating to traditional medicine should be modified for the benefit of Indian Entrepreneurs and why any form of patent on marijuana plants abroad should be challenged by India as they challenged patents on neem and turmeric.

Keywords: Traditional Knowledge, SMEs, Indigenous, Intellectual property.

INTRODUCTION

Traditional knowledge is something that belongs to the local community, it has been there for centuries and has an element of holiness to it. The aim of bringing biodiversity into the ambit of intellectual property rights has been to make sure that the creation of mind processes continues in flora and fauna respectively. Such creations will allow tribal communities to become entrepreneurs and earn money with the intellect available to them.

This is a community-based approach, and the concept of traditional knowledge has evolved to make sure that no person takes exclusive benefit of the knowledge which already exists in the

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community. This allows two things to happen, firstly tribal take their product to market and secondly if their product goes to market after certain innovation has been done by a entrepreneur then the tribal community will get benefits for the basic knowledge which was modified by the entrepreneur. Such knowledge is to be used with the consent of the community and they should be given monetary benefits for the same, hence the concept of access and benefit-sharing saw light with the Nagoya protocol. Traditional knowledge is undervalued in Small and Medium Enterprises (SMEs) because a strong policy and implementation mechanism for the same is missing.

SMEs are the backbone of the Indian economy where they play an integral role in its development and growth.³ They have continued to contribute immensely towards creating employment and reducing rural-urban disparity. As per the data of the World Bank, they represent 90 per cent of the world's businesses, and they employ 50 per cent of the global workforce.⁴ In India, they employ more than 120 million people and ensure the flow of money across various levels of society.⁵ They also account for 29 per cent of the Gross Domestic Product (GDP).⁶ Focusing on small and medium enterprises, especially in countries like India which has a huge population, and a high unemployment rate is very crucial as they operate in major sectors. They are like the building blocks of sustainable growth and innovation in developing countries. According to the World Bank, SMEs account for the majority of businesses around the world.⁷ However, their importance is eclipsed by the big corporate entities that are already established. With globalisation and liberalisation, SMEs are facing tough competition from their global counterparts. Their potential is not being fully realised due to a lack of resources in terms of finance, technology, labour etc. Insufficient information and know-how, inability to adapt to changing market demand and lack of technological advancement are some other factors that contribute to their failure.

The usage of traditional medicine in India is highly undervalued. Legal hindrance has stopped production, procurement, selling, distribution, research, and development. In general, many SMEs fail to survive as they are unable to cope with the tough competition and large players

³ United Nations, *MSMEs: Key to an inclusive and sustainable recovery*, THE UNITED NATIONS, <https://www.un.org/en/observances/micro-small-medium-businesses-day>.

⁴ World Bank, *Small and Medium Enterprises (SMEs) Finance*, THE WORLD BANK, <https://www.worldbank.org/en/topic/sme/finance>.

⁵ IBEF, *MSME Industry in India*, INDIA BRANDEQUITY FOUNDATION, <https://www.ibef.org/industry/msme.aspx>.

⁶ Id. at 2.

⁷ Id. at 1.

in the market. With the opening of borders and flexible trade barriers, there is a global market for the expansion and growth of traditional medicine. The widespread globalisation and liberalisation allow consumers and buyers to not restrict themselves to the domestic markets. As far as traditional medicine is concerned, we are way behind our international counterparts. Many industrialised countries have dedicated businesses that have monopolistic rights in some way or the other on medicinal compounds of these traditional plants such as marijuana. The same is illegal in India, if the government changes the law, then such SMEs will face strong competition not only from the domestic players but from established international players first. In the past, we have witnessed international firms entering the domestic markets often consuming small enterprises like big sharks in the sea. Thus, making it extremely difficult for small businesses to survive or retain in the market. The Covid-19 pandemic further made matters worse for SMEs where over 82% of more than 250 small businesses suffered negative impacts.⁸ Traditional medicine is growing in the international field rapidly. The World Health Organization (WHO) in the last few years has recognized the increasing potential of traditional medicine and has been actively trying to promote its usage worldwide. Traditional medicine is part of traditional knowledge, and it is important to discuss the medicinal uses of marijuana because even though this plant is associated with the creation of harmful substances, but its medicinal properties has been practiced for centuries by many Indian tribes as customary. Indian tribal communities being one of the biggest stakeholders of traditional knowledge should be able to benefit economically from the same.

In general, sometimes the Intellectual Property Rights strategy used by other big entities creates a legal monopoly in the market which not only leads to reduced businesses for SMEs but also leads to legal consequences against them if they infringe any such rights. Lack of technical knowledge, business intelligence and ignorance with respect to IPR is leading to the downfall of many SMEs. Despite such obstacles, economies like India are tremendously dependent on SMEs, especially for employment generation and economic development thereby, improving the standards of living and shifting the workforce from the unorganised sector to the organised sector.⁹ Sometimes, the Government also steps in to save the SMEs by providing subsidies, rebates, and other incentives. A recent European study shows that SMEs that use IP Rights

⁸ FE Online, *Over 82% small businesses had negative Covid impact; lack of market access top challenge: Survey*, FINANCIAL EXPRESS, <https://www.financialexpress.com/industry/sme/msme-eodb-over-82-small-businesses-had-negative-covid-impact-lack-of-market-access-top-challenge-survey/2238325/>.

⁹ ³⁷ SME, *SME Sector in India*, SME CHAMBER OF INDIA, <https://www.smechamberofindia.com/about-msme-in-india.php>.

perform better than companies that do not focus on Intellectual Property.¹⁰ IP Rights have gained attention in the last few years as they are at the centre of interest in the knowledge-based economic environment. Many large international companies have included intellectual property in their growth strategy. However, in India various small companies are unaware of intellectual property so, it is tough for them to build strategies dealing with intellectual property rights. Some are even sceptical about investing in such rights. There is no question that small and medium enterprises have a lot to worry about, from surviving in the market to building their name to growth and expansion. However, they must realise that Intellectual Property is the key economic asset and at the end of the day they are very core to whatever activities they are doing. They must build a strategy to use the Intellectual Property as leverage for their growth in the future. However, over the years trends of IP Filing in India have improved.

SIGNIFICANCE OF INTELLECTUAL PROPERTY SMEs

Melting borders and losing trade barriers have made the market highly competitive and dynamic. Enterprises do not only have to protect and secure their tangible properties but their intangible properties as well to survive the cut-throat competition. Leveraging intellectual property rights as tools to combat high competition will not only provide SMEs with the chance to build a resilient business but they will become more competitive as well. Inventors and entrepreneurs themselves must treat their intellectual property as valuable assets.¹¹ The fact that they are not tangible does not mean that they are less valuable. There is a common misconception that Intellectual Property is only preserved for big businesses, but that it is not the case. SMEs that apply for patent, trademark, design, Copyright, or Geographical Indication are more likely to experience high growth than SMEs that do not.¹²

When a business owner is focused on establishing their brand or when their business is growing rapidly, it is understandable that they might overlook the need to register and protect their patent and trademark or any other IP rights. However, this can result in dire consequences for small businesses. SMEs must realise that Intellectual Property is the path to their future growth and expansion. It is extremely important for businesses to stand out from their competitors in

¹⁰ EPO, *Study highlights economic benefits of owning intellectual property rights- especially for small businesses*, EUROPEAN PATENT OFFICE, (Feb. 98, 2021), <https://www.epo.org/news-events/news/2021/20210208.html> (Visited on July 04, 2021).

¹¹ CNIPA, *Intellectual Property Basics*, CHINA NATIONAL INTELLECTUAL PROPERTY ADMINISTRATION, (2019) https://www.wipo.int/edocs/pubdocs/en/wipo_pub_1056.pdf.

¹² Frank Tietze, *Empowering SMEs to leverage IP for innovation*, WORLD INTELLECTUAL PROPERTY ORGANIZATION, https://www.wipo.int/wipo_magazine/en/2021/02/article_0003.html.

order to survive in the market. Intellectual Property will not only provide protection to their technology and innovation, but it will also boost brand value. It will help the business to grow and flourish by setting it apart from competitors which may facilitate global expansion. New ideas are the lifeblood of SMEs and Intellectual Property has become their core asset which not only makes the owner the certified owner of their intellectual property but also boosts business potential. It is very crucial for SMEs to use the Intellectual Property as a commercial tool to protect new ideas, innovations, brands etc. Earning profit is the main objective of all companies and it is a necessary component that keeps them alive. Investment in Intellectual Property will provide more grounds for increased revenue in the future apart from building and protecting their brand name and inventions.

The investment in traditional medicine will provide new areas of exploration to the entrepreneurs. The chances of such investment maturing into exclusive intellectual rights is a very favorable outcome. The trajectory may support the rise of SMEs but an absence of a strong framework to complement the same is a very big issue. As far as traditional medicine is concerned its biggest component or marijuana is illegal to use.

WHY MARIJUANA IS TRADITIONAL KNOWLEDGE OF INDIA

The Nagoya Protocol on access to genetic resources and the fair and equitable sharing of benefits arising from their utilization of the convention on biodiversity is the only international instrument that could be considered to have touched the domain of traditional knowledge but failed to define the same. This protocol talks about access and benefit-sharing as well as indulging local communities by giving them a share of profits. The drawback of this protocol is that it does not define what can be traditional knowledge in exact words. To understand what traditional knowledge means we have to rely on the definition provided by the World Intellectual Property Organization (WIPO). WIPO defines Traditional Knowledge as “tradition-based literary, artistic or scientific works; performances; inventions; scientific discoveries; designs; marks, names and symbols; undisclosed information; and all other tradition-based innovations and creations resulting from intellectual activity in the industrial, scientific, literary or artistic fields. Tradition-based refers to knowledge systems, creations, innovations and cultural expressions which: have generally been transmitted from generation to generation”.¹³ If we keep this definition in mind, then we can very confidently conclude that marijuana is a traditional knowledge of India.

¹³ World Intellectual Property Organization, *Composite Study on the Protection of Traditional Knowledge*, Secretariate WIPO, (2003).

The ancient Hindi and Sanskrit texts have defined the use of parts of the marijuana plant for medicinal purposes by referring to it with various names such as bhang, indrasana or Vijaya.¹⁴ The Atharvaveda in 1400 BC mentioned it as a sacred grass that can help remove anxiety.¹⁵ The Sushruta in the 8th century mentions that if bhang is mixed with other herbs, then it can be anti-phlegmatic and be used to treat excess diarrhoea, bile, and phlegm.¹⁶ The Unani Medical System talks about the use of marijuana to treat the nervous system as antispasmodic and anticonvulsive.¹⁷ The efficacy of bhang and its potent presence in many ayurvedic medicines either as a major or a minor ingredient to treat diseases such as irritable bowel disease, urinary disorders, fever, skin diseases, hair diseases, edema, cold, and impotency and so on makes it highly important.¹⁸ The above documented ancient documents can help us to reiterate that Marijuana is a traditional knowledge of India respectively.

MEDICINAL USE OF MARIJUANA

In recent years there have been many reports from the developed countries where people have used marijuana in oil form to cure their cancer. In other forms, it can be used to cure or alleviate the symptoms of many diseases such as Crohn's disease, Parkinson's, glaucoma, seizures, headaches and inflammation to name a few. The presence of various cannabinoids, cannabidiol (CBD) and tetrahydrocannabinol (THC) in marijuana plants are the responsible factors that have medicinal uses in them. Opioids and cannabinoids are both among the world's oldest drugs, with usage dating back thousands of years.¹⁹

The problem is these medicinal uses of marijuana are not new discoveries, but a mere rediscovery of the same. The use of marijuana in Ayurveda is very much present in India but since the passing of the Narcotics and Drug Prevention Act 1985 (hereinafter to be referred as the Act), its use has become hidden and limited. Today there is a re-emergent use of marijuana, which is being led by western countries. India and its indigenous tribal communities are not able to benefit at all. This is undermining the local communities who cannot benefit from it respectively. The Act has significantly undermined documentation as well as the practice of many medicinal uses of marijuana held by communities to come out in the open. The

¹⁴ Umair Mirza, *The Indian antiquary* 260-262 (September 1894).

¹⁵ Id (8).

¹⁶ Id (8).

¹⁷ Himalayan Hemp, *The Ayurvedic view on cannabis*, HIMALAYAN HEMP (Oct. 16, 2019), <https://www.himalayanhemp.in/post/the-ayurvedic-view-on-cannabis>.

¹⁸ Swagata Dilip Tavhare & Rabindra Narayan Acharya. *Exploring the pharmaco-clinical view on bhanga* 59-78, (Cannabis sativa linn.).

¹⁹ Greg T. Carter, MS, MD, Volume 14, *The Argument for Medical Marijuana for the Treatment of Chronic Pain*, 14 PM 800, (2013).

developed countries have well defined intellectual property rights systems that allow patents for such discoveries, as we have seen in the past how American firms were able to get patents on medicinal uses of neem and turmeric respectively. The developed countries have granted a few patents on marijuana, its by-products, and its properties respectively.

The medicinal use of marijuana has been part of intense research and development²⁰ and because of it there has been a tremendous increase in the number of patents that are being filed for marijuana plants in western countries, many of such patents are being granted and India as a mute spectator is witnessing all this without claiming any benefit from it. Today marijuana related businesses cost more than 15 billion dollars.²¹

The State of California is among the first places in the world to allow the use of marijuana for medical purposes, the mother of a child who was not able to treat her son's bipolar disorder, post-traumatic stress disorder and impulse control disorder over the years, even after seeing many physicians and taking numerous numbers of medicine, ultimately with the use of medicinal marijuana in a cookie, the child could be treated.²² This all could have been possible because of proposition 215 or popularly known as the compassionate use Act of 1996 which is a Californian State law, and the above-discussed case pertains to the late 1990s and early 2000s respectively.

The point that needs to be understood is that though marijuana was illegal in the United States and many parts of the world. Its medicinal uses cannot be ignored and when medicinal science could not work, nature's substance came to the rescue. In cases of epilepsy the use of medicinal marijuana does highlight a reduced seizure frequency and severity, apart from it such patients even reported better sleep at night.²³

We can say that the medical field has been disrupted and forced to study and experiment with the use of marijuana to either cure or in many cases alleviate the symptoms of the diseases where pharmaceutical medicines in a sense could not perform adequately.

WHAT ARE POTENTIAL IP RIGHTS THAT NEED TO BE PROTECTED?

How a company uses IP rights solely depends upon the business strategy. SMEs must factor in Intellectual Property as something critical to their success. In this era, SMEs can communicate information about their goods and services directly to their customers and they can also have a

²⁰ Riboulet-Zemouli & Kenzi, *Traditional medicine & Cannabis Changes in the scope of control over cannabis*, (2020).

²¹ Indra Shekhar Singh, *Is India Missing Out on the Cannabis Dollar?* <https://thewire.in/business/is-india-missing-out-on-the-cannabis-dollar>.

²² O'Brien, Kevin & Peter A. Clark., *Case Study: Mother and Son: The Case of Medical Marijuana*, 41 THCR 11-13, (2002).

²³ Ladino, Ronquillo & Francisco, *Medicinal Marijuana for Epilepsy: A Case Series Study*, 41 CJNS (2014).

huge global market to do business. The chances of misuse of crucial ideas, innovation and brands by other competitors are very high. Against such backdrops, it is very important for companies to register their patents, design, and trademarks. By creating monopolies globally through intellectual property rights, various Multinational companies (MNCs) and other enterprises have increased their revenues and profits. Various foreign enterprises were successful in building their brand name by protecting their intellectual property rights.

SMEs must figure out their potential Intellectual Property Rights that needs to be protected. The interplay between traditional medicine, IP rights and SMEs can create opportunities. For example, a Patent- an intellectual property, gives the creator of the invention, and the exclusive right to use it and others may not use such inventions without their permission. The patent allows the company to create a legal monopoly for a certain time thereby, eliminating competition legally. This will not only generate income for SMEs through IP assignments and IP protection, but it will also help in building their brand name. The use of technology for support, administration or manufacture traditional medicines can become a good area for grant of patent rights.

When it comes to trademarks, they usually help in identifying the specific brand and its logo when you see it. Brands are the reasons that loyal customers come back time and again to buy the same product or services from the same business. Trademark registration boosts brand value and helps the business grow and flourish by setting it apart from that of the competitors. Registration of trademarks also helps in protecting against frauds and counterfeiting. Having a registered and enforceable trademark is very important for global expansion and building a commercial reputation. In India, a registered Trademark is not a legal requirement however, a business must get its Trademark registered. Medicine for fever is not famous as paracetamol but the trademarked name “Crocin”. Pharmaceutical companies enjoy such leverage and the same can be utilized by traditional medicine start-ups.

SMEs can also acquire another IP asset that is an Industrial Design through which they can protect the design, pattern, shape, or the combination of colour with the shape or pattern of packaging, which not only gives the product a different use or utility but also makes it fit for industrial application.

Another intellectual property asset that SMEs can use is Geographical Indication (GI). It will help in increasing sales, especially in the international market and in differentiating products. Many traditional medicines have a long-standing reputation of being region-centric and the

same has good potential to qualify for GI tags. Many people around the country travel to specific regions to procure these medicines and such usage are enough to justify the regional importance of the same.

Whereas copyright serves those who are engaged in literary and artistic works. Although it is an underrated IP asset, SMEs generally underestimates Copyright as worthy intellectual property, however, it must be noted that any marketing regulatory literature, brochures, pamphlets, product manuals etc. qualify for Copyright protection.

AREA OF INNOVATION FOR NEW ENTREPRENEURS

Today coronavirus has created opportunities for our health entrepreneurs and startups to research new medicinal products. Exploring this domain further needs a push from our government. Traditional medicine start-ups will enable our communities to earn money and benefit society at large. The health benefits of marijuana, which our communities know should be accepted and promoted respectively. Giloy is also a traditional herb that boosts immunity and is today being used by almost every household. The positive framework by the government allowed many traditional medicines to come into the mainstream. Today, many traditional medicine startups have become big brands, like Divya pharmacy, Patanjali and Himalaya. Their rise benefited local communities as well. Similarly, we have many other traditional medicines that should come into the mainstream. Marijuana is already in the mainstream and India, despite having all the knowledge, is not able to benefit from it in any way. Today there are many businesses worldwide selling marijuana in the form of cookies, biscuits, toffees and cakes. Many of these nations have gone to the extent of allowing its recreational use and here in India we are not even allowing its medicinal use. If the government legalizes its medical use for the public, beneficiaries will be able to take this in the form of tablets, syrup, powder, and oil respectively. Furthermore, new medical uses which were hidden from us will also become known to the public at large. We can have a say in the international market and save our indigenous communities from exploitation as well. We have established a traditional knowledge digital library to document and claim what is left of it, similarly, we need to claim futuristic uses of it right now and let our businesses expand in this direction. Small businesses will be able to innovate further in this regard.

CONCLUSION AND SUGGESTIONS

Our failure to recognise, safeguard and protect our traditional medicines has forced us to be a mute spectator to the international development taking place in industrialised countries. Today marijuana is being researched and used by the American pharmaceutical industry. Our ancient texts and books have highlighted the medical efficacy of this plant even before its criminalization which was used for centuries. The problem is not its re-emergence, but the way developed countries are manipulating the traditional knowledge of India without taking prior consent from the respective authorities. SMEs have a good domain to expand, but the locus standi of India is weak because we have legislation that highly limits the use of marijuana. The need of the hour is to amend the Narcotics and Drugs Prevention Act, 1985 which will allow us to use medical marijuana in the public domain and allow us to challenge the already filed patents or existing patents which has given few people exclusive rights to manipulate the medical use of this substance. Previously India had challenged neem and turmeric patents as they have been part of traditional knowledge of Indian culture since ancient times and successfully preserved them.

The move to challenge these patents saved our communities and ensured their economic benefits. These companies planned to make Neem oil and cut import dependency from India. Today this knowledge is being used by our entrepreneurs for commercial purposes worldwide. India exports neem oil to over a hundred nations and is the largest exporter of the same²⁴ on the other hand, turmeric exports had an economic value of 236 million dollars in 2018 and India is the largest exporter of the same as well.²⁵ If we act, then medical marijuana exports can reap good money by exports and in turn will benefit our economy.

We need to approach its medicinal use from two aspects, firstly for the health of the public at large and lastly as the sacred traditional knowledge of India. The court has said that the right to life is not limited to just mere animal existence²⁶ and health is an integral part of the right to life. The use of medical marijuana has come to us as a last resort, especially when medical science failed and could not provide relief. Furthermore, the economic value that is linked with the use of medical marijuana is increasing day by day as more and more people have started

²⁴ Pisum, *Indian neem exporter*, PISUM FOOD SERVICES, <https://pisumfoods.com/herbs/neem>.

²⁵ PTI, *North America is the largest market for India's turmeric export*, June 26, 2019 <https://www.thehindubusinessline.com/markets/commodities/north-america-is-the-largest-market-for-indias-turmeric-exports-tpci/article28157907.ece>.

²⁶ Maneka Gandhi vs Union of India, 1978 AIR 597.

their research on how marijuana plants can be used in different ways to treat various types of diseases or how they can provide relief to the people. The presence of marijuana in ancient texts acts as documented proof in Atharva Veda and Ayurveda helps India develop a strong case in front of the world to reclaim the marijuana plant as well as make sure that our tribal communities who hold this knowledge benefits economically for the same. The longer we ignore this topic the weaker our claim will become. We have already lost enough, and we can't lose more. We need to learn lessons from the past on how potato plants which were indigenous to Bolivia became part of the palate of the whole world but could not benefit economically to the Bolivian farmers. Hence, we cannot let something like this happen to our Indian community. We need to give our Indian entrepreneurs a big say in this scenario by legalizing the public use of medical marijuana.

SMEs should treat intellectual property rights as an asset rather than treating them as an expense. They must realise that the only way to save themselves from big sharks in the market is to become one. Investment in traditional medicine does not only provide them with the means to opportunities to create their businesses but generates revenue as well. It does not only help them to cope with the tough competition in the merciless international markets, but also provides them with the opportunities to expand and grow in the same market. The sooner the small enterprise realises the need to protect their ideas, innovation, and brand the better it is for them. The Government of India has taken several initiatives to boost MSMEs and it has also provided various demarches in the field of IPR. But when it comes to the utilisation of IP rights by MSMEs, India is still lagging. Those efforts are recognised, but still, there are miles to cover. The whole idea of having a fusion of traditional medicine and SMEs will stay a myth as long as the use of marijuana, the major component of Indian traditional medicine, stays illegal to use. The best we can see is international companies getting rich at the expense of Indian entrepreneurs and traditional knowledge holders because research and development in this field were “forbidden” due to some international pressure and the countries that bullied us to criminalise the same are earning billions of dollars from the production of the same.
