

Role of IPR in India Sustainable Development

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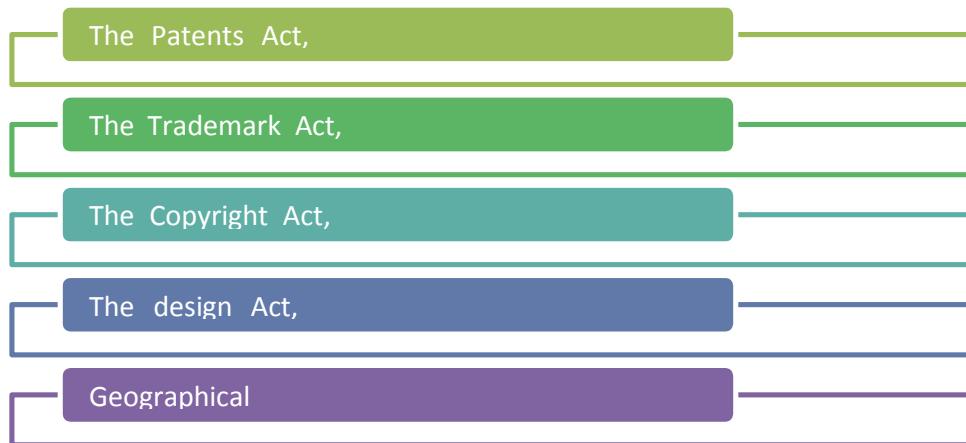
Abstract: *In India, IPR (intellectual property rights) is essential to sustainable development, rising economy with enormous potential for innovation, creativity, and expansion. A method of addressing current demands without sacrificing the capacity of future generations to address their own needs is sometimes referred to as sustainable development. It entails pursuing social, economic, and environmental objectives in a coordinated and balanced way. The IPR, however, might restrict the free flow of technology that India needs to support sustainable growth. However, the IPR is crucial to India's technical and economic development. As a result, it is essential to comprehend and evaluate the part that IPR plays in India's sustainable development.*

The purpose of this research paper is to analyze the role of IPR in sustainable development in India. The research paper aims to provide insights into the existing IPR regime in India, its effectiveness, and its impact on sustainable development. It highlights the importance of IPR in promoting innovation, technological advancements, and knowledge creation. The research paper also examines the challenges and opportunities in the implementation of IPR in India and provides recommendations to improve the IPR regime in the country.

Keywords: IPR, sustainable development, economic growth, technological growth, and the like

I. INTRODUCTION

IPR is "the most basic form of property because a man uses nothing to produce it other than his brain," according to Prof. Niblett. The fundamental justification for intellectual property is that a man ought to be the owner of the things he creates. He is little more than a slave if what he produces can be taken away from him. One nowadays, technology is used for everything. Smart watches, smartphones, smart bulbs, and other advanced devices are used by consumers to not only live a luxurious lifestyle where they can control everything with voice commands or their phones, but also to save resources like water and electricity, which is the main step towards the sustainable development.



¹ https://www.journalijar.com/uploads/523_Paper%20-%208.pdf (last visited on 10, February 2023)

People are more aware using natural resources indiscriminately due to which the importance of the sustainable development increases exponentially. The sustainable development refers to a way of meeting the needs of the present generation without compromising the ability of future generations to meet their own needs and these ways may corresponds to various advanced technologies and advanced equipment's. However, the selling, manufacturing and other rights related to these technologies and advanced equipment are restricted by the IP laws. Moreover , IP laws advertise these cutting-edge technologies through licensing and commercialization, such as through the use of green technology, eco-friendly products, and the like. Figure 1, which is provided below, illustrates the many IP regulations that are in charge of fostering sustainable development.

Legal Framework Governing IPR in India

The protection of Intellectual Property Rights (IPR) is crucial for the growth and development of any country's economy. In India, the legal framework governing IPR is robust and well-developed, with various laws and regulations aimed at protecting and enforcing these rights. The legal framework that governs the IP laws in India are as follows:-

1. Patents

- Governed by: The Patents Act, 1970
- Administered by: The Controller General of Patents, Designs and Trade Marks
- Protection period: 20 years from the date of filing

2. Trademarks

- Governed by: The Trade Marks Act, 1999
- Administered by: The Controller General of Patents, Designs and Trade Marks
- Protection period: 10 years from the date of registration, renewable indefinitely

3. Copyrights

- Governed by: The Copyright Act, 1957
- Administered by: The Registrar of Copyrights
- Protection period: Life of the author + 60 years

4. Designs

- Governed by: The Designs Act, 2000
- Administered by: The Controller General of Patents, Designs and Trade Marks
- Protection period: 10 years from the date of registration, renewable for 5 years

5. Geographical Indications

- Governed by: The Geographical Indications of Goods (Registration and Protection) Act, 1999
- Administered by: The Controller General of Patents, Designs and Trade Marks
- Protection period: 10 years from the date of registration, renewable indefinitely

6. Semiconductor Integrated Circuits Layout-Design

- Governed by: The Semiconductor Integrated Circuits Layout-Design Act, 2000
- Administered by: The Registrar of Semiconductor Integrated Circuits Layout-Design
- Protection period: 10 years from the date of registration

International Treaties and Agreements

India is a signatory to several international treaties and agreements, including:

- Paris Convention for the Protection of Industrial Property (1883)
- Berne Convention for the Protection of Literary and Artistic Works (1886)
- Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) (1994)
- World Intellectual Property Organization (WIPO) treaties

Enforcement Mechanisms

India has established various enforcement mechanisms to protect IPR, including:

- Intellectual Property Appellate Board (IPAB)
- Courts (District Courts, High Courts, and Supreme Court)
- Police and Customs authorities

- Department of Industrial Policy and Promotion (DIPP) India has also signed various international agreements and treaties related to IPR, such as the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and the Convention on

Biological Diversity (CBD). TRIPS is a part of the World Trade Organization (WTO) agreement and sets out the minimum standards for the protection and enforcement of IPR in member countries. India has implemented the TRIPS agreement through its domestic laws and regulations. The CBD aims to promote the conservation and sustainable use of biological diversity and includes provisions for the protection of traditional knowledge associated with biodiversity. In other words, the legal framework governing IPR in India is comprehensive and well-developed, with various laws and regulations aimed at protecting and enforcing these rights. The country has also signed various international agreements and treaties related to IPR, which demonstrate its commitment to promoting innovation and protecting traditional knowledge and heritage. However, there is still a need for continuous efforts to strengthen and enforce the legal framework to promote innovation and economic growth while also ensuring that the public has access to these innovations.

Challenges in Implementing IPR in the Context of Sustainable Development

Intellectual property rights (IPR) are essential for protecting innovation, creativity, and knowledge. However, the implementation of IPR in the context of sustainable development is a complex and challenging task. Sustainable development aims to promote economic growth while protecting the environment and ensuring social justice. The implementation of IPR can hinder the achievement of these goals. In developing countries like India, and the potential negative effects of IPR on the environment. One of the significant challenges in implementing IPR in the context of sustainable development is that it may hinder access to knowledge and technology transfer. Developing countries like India rely on knowledge and technology transfer to promote economic growth and development. However, IPR can act as a barrier to the transfer of technology and knowledge. For instance, patent laws can make it difficult for developing countries to access essential medicines and medical technologies.

Additionally, IPR can hinder access to knowledge, which can negatively affect scientific research and development. Researchers rely on access to previous research to advance their work, and the restriction of access to knowledge can hinder scientific progress. This is particularly concerning in the context of sustainable development, where scientific research is essential for finding solutions to environmental challenges. Another significant challenge in implementing IPR in the context of sustainable development is the potential negative effects on the environment. There is concern that the use of patented seeds can lead to a loss of biodiversity, soil degradation, and other environmental problems. Furthermore, IPR can hinder the development and adoption of environmentally friendly technologies. The high cost of licensing patented technologies can make it difficult for small businesses and developing countries to adopt environmentally friendly technologies. This can lead to a slower adoption of sustainable technologies, hindering progress towards achieving sustainable development goals.

Therefore, implementing IPR in the context of sustainable development is a complex and challenging task. IPR can hinder access to knowledge and technology transfer, particularly in developing countries like India. It is essential to balance the protection of IPR with the need to promote sustainable development, and policymakers must consider these challenges when developing policies and regulations regarding IPR.

Potential Benefits of IPR in Promoting Sustainable Development

Intellectual Property Rights (IPR) are legal rights that protect inventions, creations, and innovations that are the result of human creativity and intellectual efforts. The concept of IPR has been gaining traction in recent years as a means to promote sustainable development. The potential benefits of IPR in promoting sustainable development are numerous and varied, including the promotion of innovation and creativity, encouraging technology transfer, promoting access to knowledge, and creating new jobs and promoting economic growth.

One of the primary benefits of IPR in promoting sustainable development is the promotion of innovation and creativity. IPR provides inventors, creators, and innovators with the incentive to invest in the development of new products and

technologies by granting them exclusive rights to use and exploit their creations. This, in turn, promotes the development of new products and technologies that are environmentally friendly and socially beneficial.

Another benefit of IPR in promoting sustainable development is the encouragement of technology transfer. IPR can be used to promote the transfer of technology from developed to developing countries, which can help to close the technology gap and promote sustainable development. The transfer of technology can help developing countries to improve their productivity and competitiveness, which can help them to achieve their sustainable development goals. IPR can also be used to promote access to knowledge. Intellectual property protection encourages the creation and dissemination of knowledge by providing creators and innovators with the incentive to share their knowledge with others. This, in turn, promotes the development of new ideas and technologies that can help to promote sustainable development.

Moreover, IPR has the potential to create new jobs and promote economic growth. Intellectual property protection encourages the development of new industries and businesses, which can create new jobs and promote economic growth. This, in turn, can help to promote sustainable development by providing people with the means to meet their basic needs and improve their standard of living. Therefore, IPR has the potential to play a significant role in promoting sustainable development. By promoting innovation and creativity, encouraging technology transfer, promoting access to knowledge, and creating new jobs and promoting economic growth, IPR can help to address the challenges of sustainable development. However, it is important to ensure that IPR is used in a way that balances the interests of creators and innovators with the broader public interest in promoting sustainable development.

Strategies for Promoting Sustainable Development through IPR in India

The importance of sustainable development has been recognized worldwide, and intellectual property rights (IPR) are increasingly being recognized as a powerful tool for promoting sustainable development. The various strategies that are implemented by India to promote sustainable development through IPR are as follows:-

- **Technology Transfer:-** India has always been a country that has embraced technology and innovation. It has an established track record of developing indigenous technologies and products. To promote sustainable development, the government has been encouraging the transfer of technology from developed countries. This has helped Indian companies to become more competitive and innovative in their approach, leading to more sustainable growth.
- **Capacity Building:-** The government has been working to improve the capacity of its citizens to use and develop technology. This has been done by providing education and training programs on IPR and sustainable development. These programs have been aimed at entrepreneurs, innovators, and researchers to equip them with the knowledge and skills they need to take advantage of IPR for sustainable development. Public awareness campaigns have also played a critical role in promoting sustainable development through IPR in India. The government has launched several campaigns aimed at raising awareness about the importance of IPR and sustainable development. These campaigns have helped to create a culture of innovation and entrepreneurship, which has been critical in driving sustainable development in the country.
- **National Intellectual Property Rights (IPR) Policy in 20162: -** The policy aims to create a robust and comprehensive legal framework for the protection and enforcement of IPR in India. The policy has been designed to encourage innovation, promote entrepreneurship, and foster a culture of creativity and collaboration. The private sector has also played an essential role in promoting sustainable development through IPR in India. Many companies have taken initiatives to develop sustainable products and technologies.
- **The Paris Convention: -** Article 5A of the Paris Convention talks about the rules concerning compulsory licenses relating to patents and utility models. Furthermore, the Article 5A (2) identifies the right of each member state to take legislative measures providing for the permit of compulsory licenses to prevent abuses which might be a result of the exercise of the exclusive rights conferred by the patent.
- **Promoting the licensing of green technologies: -** Provisions relating to compulsory licenses for green technologies are stated in the Paris Convention, TRIPS, and national legislations. Article 5A of the Paris Convention outlines the rules concerning compulsory licenses for patents and utility models. Article 303 and 314 of the TRIPS Agreement grant exceptions and limitations to the exclusive rights of patent holders, allowing for limited exceptions to be made.

National legislations of many industrialized and developing countries also allow the government and/or third parties to use a patented invention under certain specific circumstances and conditions.

- WIPO Green: - It aims at accelerating the adoption and deployment of environmental technologies, especially in developing countries and emerging economies.⁵ The program provides access to green technologies, technical assistance, and licensing and financial support. WIPO GREEN promotes technology licensing agreements for green technologies to increase their usage globally, particularly in developing countries. The program offers a platform that provides information on available green technologies and the specific needs of these technologies to public and private sector entities. The goal is to create a global network that encourages partnerships with companies offering essential elements, such as patent licenses, trade secrets, technical documentation, and training programs.

- European Commission Reports:- The European commission reports are the reports that aims at identifying specific patterns of technology to foster environmental innovation in developing and emerging economies is crucial. The IP system has an essential role to play in shaping a green future, particularly in promoting a low-carbon future. The European Commission⁶ has set a target for the European Union to be carbon neutral by 2050, and countries are making strides towards this goal by transitioning to sustainable and clean energy sources.

RECOMMENDATIONS

The survey was taken forward to answer for the question whether IPR plays a major role in Sustainable Development or not. The survey included students, faculties and advocates of various universities and places. The sample audience were requested to answer certain basic question total of 50 student, teachers and advocates were considered in this activity which was conducted online via Google form. The focus was to collect data from different regions of India.

The Survey contained following questions:

1. Do you think IPR plays a major role in sustainable development in India?
2. what is the role of IPR in your daily life w.r.t. ecofriendly products?
3. Do you think that IPR creates a restriction on the production, manufacturing and selling of goods that promote sustainable development?
4. Do you think that the government has taken enough steps to promote sustainable goals in India?
5. what are your suggestions that government should address to promote sustainable development in India?

The conclusion from the survey is that almost everyone is aware about IP laws and 77.8% believes that IPR plays a major role in sustainable development in India, whereas 15.6% people are still confused. Furthermore, only 42.2% of people believes that IPR creates a restriction on the promotion of the sustainable development in India, while 24.4% are against this perspective. Moreover, 35.6% believes that the government has taken appreciable steps to promote sustainable development and 26.7% still expects more.

The recommendations with respect to the role of IPR in sustainable development can be seen as: -

- Encouraging innovation: IPR protection encourages innovation and creativity by providing inventors and creators with exclusive rights to their creations. In India, a robust IPR regime can help to incentivize entrepreneurs and innovators to invest in R&D and develop new technologies that are sustainable and environmentally friendly. This, in turn, can lead to the creation of new jobs, economic growth, and a more sustainable future.

- Protecting traditional knowledge: India is rich in traditional knowledge and practices that are vital for sustainable development. The country has a diverse range of traditional knowledge, including Ayurveda, Yoga, and traditional agricultural practices. IPR protection can help to safeguard these practices and ensure that they are not misused or exploited by others. It can also provide a platform for traditional knowledge holders to benefit from their knowledge by licensing it to others.

- Promoting clean technologies: IPR protection can encourage the development of clean technologies by providing inventors and creators with exclusive rights to their inventions. This can lead to the creation of new technologies that are more energy- efficient, environmentally friendly, and cost-effective. IPR protection can also attract foreign investment and technology transfer, which can help to accelerate the adoption of clean technologies in India.

2. <https://www.drishitias.com/daily-updates/daily-news-analysis/national-ipr-policy#:~:text=What%20is%20the%20National%20IPR,Creative%20India%3B%20Innovative%20India%22.>

3 Article 30 of the TRIPS Agreement 6 European Commission reports.

- **Protecting biodiversity:** IPR protection can help to protect India's rich biodiversity by incentivizing the development of new plant and animal varieties that are more resistant to pests and diseases. This can lead to more sustainable and efficient agricultural practices, which can help to reduce the environmental impact of agriculture. IPR protection can also encourage the development of new medicines and drugs from natural resources, which can benefit both human health and the environment.
- **Strengthen IPR laws and enforcement:** The Indian government should strengthen its IPR laws and enforcement mechanisms to provide better protection to innovators, creators, and traditional knowledge holders. This can help to encourage innovation, protect traditional knowledge, and promote the development of clean technologies.
- **Increase awareness of IPR:** The Indian government should increase awareness of IPR among entrepreneurs, innovators, and traditional knowledge holders. This can be achieved by organizing workshops, training programs, and outreach activities to educate people about the benefits of IPR protection and how to obtain it.
- **Foster collaboration between stakeholders:** The Indian government should foster collaboration between different stakeholders, including industry, academia, and civil society, to promote sustainable development through IPR protection. This can be achieved by creating platforms for dialogue, sharing best practices, and promoting partnerships between different sectors.
- **Develop a national IPR strategy:** The Indian government should develop a national IPR strategy that integrates IPR protection into the country's overall sustainable development goals. This can help to ensure that IPR protection is aligned with India's broader development objectives and that it contributes to the country's long-term sustainable growth.
- **Facilitate technology transfer:** The Indian government should facilitate the transfer of technology from developed countries to India by providing incentives for technology transfer and creating a favorable regulatory environment. This can help to accelerate the adoption of sustainable technologies in India and reduce the country's carbon footprint.
- **Provide financial support:** The Indian government should provide financial support to innovators, entrepreneurs, and traditional knowledge holders who are developing sustainable technologies and practices. This can be achieved through grants, subsidies, and tax incentives, which can help to reduce the financial risk associated with R&D and innovation.
- **Foster international cooperation:** The Indian government should foster international cooperation on IPR protection and sustainable development by participating in international treaties and agreements. This can help to ensure that India's IPR regime is aligned with international standards and that the country benefits from global knowledge exchange and collaboration.
- **Strengthen IPR education:** The Indian government should strengthen IPR education in schools, colleges, and universities to create a culture of innovation and creativity. This can be achieved by incorporating IPR education into the curriculum and providing training programs for teachers and students.
- **Protect the rights of indigenous communities:** The Indian government should protect the rights of indigenous communities who hold traditional knowledge and practices that are important for sustainable development.
- **Invest in R&D for neglected diseases:** The pharmaceutical industry should invest in R&D for neglected diseases that disproportionately affect low-income countries.
- **Promote public-private partnerships:** The Indian government should promote public-private partnerships to encourage innovation and technology transfer in sustainable development.
- **Adopt sustainable manufacturing practices:** The pharmaceutical industry should adopt sustainable manufacturing practices that minimize waste, reduce energy consumption, and promote the use of renewable energy sources. This can be achieved by implementing green chemistry principles, optimizing production processes, and investing in renewable energy technologies.
- **Promote circular economy principles:** The pharmaceutical industry should adopt circular economy principles by promoting the reuse, recycling, and repurposing of materials and products.
- **Support access to medicines in low-income countries:** The pharmaceutical industry should support access to medicines in low-income countries by partnering with local governments, NGOs, and other stakeholders. This can be achieved by providing affordable pricing, investing in local manufacturing facilities, and supporting capacity building and training.

- Promote transparency and ethical business practices: The pharmaceutical industry should promote transparency and ethical business practices that align with sustainable development goals. This can be achieved by implementing strong governance structures, promoting responsible marketing practices, and engaging in public-private partnerships that prioritize sustainability and access to medicine

II. CONCLUSION

Intellectual Property Rights (IPR) play a vital role in promoting sustainable development in India. The country has recognized the importance of IPR in achieving its development goals and has implemented various policies and initiatives to encourage innovation and protect intellectual property. India has also taken measures to ensure that IPR does not become a barrier to access to essential medicines and technologies, particularly for the poor and vulnerable sections of society. Despite the progress made, there are still challenges to be addressed in the area of IPR and sustainable development in India. These include improving the effectiveness of IP laws and regulations, strengthening enforcement mechanisms, and promoting greater public awareness and understanding of IPR. It is also important to strike a balance between protecting intellectual property and promoting access to essential goods and services, particularly in the context of public health and environmental sustainability.

Overall, the integration of IPR into sustainable development policies and strategies is essential for promoting innovation, creating economic opportunities, and achieving sustainable development goals in India. As the country continues to develop and face new challenges, the effective management of IPR will be critical to ensuring a prosperous and sustainable future for all.

BIBLIOGRAPHY

- [1]. The Patent Act, 1970
- [2]. The Trademark Act, 1999
- [3]. The design Act, 2000
- [4]. Copyright Act, 1957
- [5]. TRIPS Agreement
- [6]. Paris Agreement
- [7]. WIPO Green
- [8]. National IPR policy, 2016
- [9]. Philippe Cullet : Intellectual Property Protection and Sustainable Development, 2005, Lexis Nexis Butterworths, New Delhi.
- [10]. Tejaswani Apte : A simple guide to IPRs, Biodiversity and Traditional Knowledge, 2006, Publications by Kalpavriksh Environmental Action Group
- [11]. Graham Dutfield : Intellectual property rights, trade, and biodiversity: seeds and plant varieties, 2000, Earthscan Publication Ltd., London.
- [12]. <https://ieeexplore.ieee.org/document/6316803>
- [13]. <https://www.legalserviceindia.com/legal/article-7335-the-role-of-intellectual-property-rights-in-economic-development.html>
- [14]. <https://ijpiel.com/index.php/2022/12/01/role-of-ipr-in-the-generation-of-renewable-energy/>
- [15]. <https://www.wipo.int/about-ip/en/>
- [16]. <https://www.unescap.org/sites/default/files/Pedro%20Roffe-Intellectual%20Property%20Rights%20and%20SD.pdf>
- [17]. <https://www.mondaq.com/india/trade-secrets/938054/green-ip--a-way-forward-to-sustainability>
- [18]. <https://ip4sustainability.org/2020/07/10/how-can-intellectual-property-contribute-to-the-2030-agenda-for-sustainable-development/>
- [19]. <https://www.sciencedirect.com/science/article/pii/S1877343521000580>