Policy Research Journal
ISSN (E): 3006-7030 **ISSN (P) :** 3006-7022 Volume 3, Issue 10, 2025

THE RELATIONSHIP BETWEEN IPR STRATEGIES AND SUSTAINABLE ECONOMIC DEVELOPMENT IN PAKISTAN

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DOI:https://doi.org/10.5281/zenodo.17310413

Keywords
Environmental, Social and Governance (ESG), Sustainable Economic, Intellectual Property Rights, Sustainable Development Goals

Article History
Received: 18 August 2025
Accepted: 28 September 2025
Published: 10 October 2025

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Abstract
This paper examines the complicated relationship between the IPR policies and sustainable economic development (SED) in Pakistan, emphasizing the importance of innovation, strong legal frameworks and responsible government in sustaining national prosperity. Innovating economies need intellectual property to foster creativity, attract foreign investment and advance research and technology. Pakistan still struggles to enforce intellectual property rights due to inadequate institutions, public ignorance and poor policy execution. Harmonizing IPR frameworks with the UN's Sustainable Development Goals (SDGs) and the Environmental, Social and Governance (ESG) principles that can accelerate sustainable development, according to the report. By supporting green technology and good corporate practices, intellectual property protection supports SDGs including renewable energy, industrial innovation and climate action. Pakistan's efforts to enhance its IPR system by adopting new legislation, signing international treaties and creating specialized organizations demonstrate its renewed commitment to innovation. Despite these efforts, enforcement, education and agency collaboration remain issues. The report recommends strengthening IPR protection, increasing R&D investment and integrating ESG compliance to build a knowledge-based economy. A robust IPR framework helps Pakistan's economy stay competitive and advance toward sustainable, inclusive and innovative growth.

1. INTRODUCTION

In the modern global economy, IPR protection and management are crucial to innovation, competitiveness and sustainable economic development. Intellectual property fosters innovation and protects creativity as governments integrate knowledge-based sectors and technological advances into their growth frameworks. To attract foreign investment, boost R&D and comply with TRIPS, developing nations like Pakistan must enhance IPR frameworks. IPR, ESG principles and the UN Sustainable Development Goals (SDGs) show the growing need for innovation that promotes economic growth and tackles societal and environmental issues. This paper examines how an effective IPR framework might promote innovation, responsible governance and global competitiveness in Pakistan's sustainable economic growth.

Economic progress is dependent on innovation.

When the Creators and the Innovators are convinced that their intellectual property rights will be safeguarded, they are encouraged to engage in R&D activities. The intellectual property law attracts foreign investment by providing a secure framework for protecting innovations. This safeguards their investments and protects them from unauthorized use or exploitation. These foreign investments can bring in capital, advanced technologies and expertise, which can contribute to the overall growth and development of local industries and boost the economy (Masudi, 2023).

The absence of intellectual property rights hinder innovation. In the absence of encouragement and appreciation, an individual will be unable to innovate, despite possessing an abundance of knowledge, skills and creativity. If this continues on a big scale, humanity will use main technology and practices that will hinder sustainability.

Innovation is essential for sustainable growth and economic development

Innovators and creators frequently enter in the market and compete when they are confident that their intellectual property rights are secure. This competition drives the development of better products and services, enhances quality, expands consumer choice and promotes efficiency, innovation and overall consumer welfare. Intellectual property law is important for the expansion and improvement of economies in many different fields, not limited to those dealing with technology, medicines, food production, the arts and conventional knowledge-based enterprises.

Intellectual Property Laws in Pakistan encourage innovators and creators to devote time, money and resources in creating new ideas and the technologies, boosting economic progress. Patents, trademarks and copyrights allow people to profit from their inventions. They may license or sell their IP, build alliances and generate numerous revenue sources, creating a dynamic, innovative economy. The innovation-boosting effects of these regulations can boost productivity, job creation and industry growth, creating a knowledge-based economy.

While it is encouraging to see the government making strides to improve Pakistan's IP regime, several obstacles remain, including as a general lack of knowledge and comprehension among both the general public and creatives, as well as a severely lacking legal framework. If Pakistan wants to foster economic growth and progress, it must address these difficulties.

Investment in inventions cannot be secured without the protection of IPRs

Economic development, ecological preservation and social goals are all profoundly affected by intellectual property rights (IPR) regulations. Ecologic finds intellectual property rights (IPR) regulations that help achieve SDGs as part of the IPDEV initiative. It looked at how developing nations and those that are candidates to join the European Union may make the most of intellectual property rights regulations to aid in sustainable development using quantitative and qualitative methods.

Regarding foreign IPR regimes, people have different opinions. Some contend that expansionist tendencies are essential reactions to globalization and technological progress. They stress that TRIPS and similar regimes will be good for all nations as they promote creativity and innovation and bring in investments and technology transfer. Others argue that the immediate expenditures on administration and enforcement would cause many nations to lose out on the advantages in the long run.

IPRs positively affect economic growth (Gould and Gruben, 1996). The link is higher and more widespread in industrialized nations than developing ones. The country's economic infrastructure and per capita GDP dramatically affect the IPR's efficiency. (Asiedu, E., Esfahani, H. 1999). Foreign Direct Investment Project Ownership. Electronic Journal SSRN. Falvey and others (2004) argue that IPR protection depends on a country's infrastructure and development.

The UN formed WIPO in 1967 through the WIPO treaty. IPR protection is its specialty. Its members aim to promote global intellectual property protection by nations and international entities. M. Blackman (2003). Intellectual property powers economic progress (World Patent Information, 25(4), 359-360).

A number of legislations make up Pakistan's intellectual property system. These include the Copyright Ordinance of 1962. This protects creative works and the Trade Marks Ordinance of 2001, which protects logos and companies. While the Registered Designs Ordinance of 2000 safeguards the visual appeal of products, the Patents Ordinance of 2000 ensures that innovators have exclusive ownership of their scientific advancements. The Plant Breeders' Rights Act of 2016 demonstrates a rising understanding of the need of safeguarding plant varieties, while the Geographical Indications (Registration and Protection) Act of 2020 addresses items tied to certain geographical locations. Taken as a whole, these laws lay up a thorough framework for fostering innovation and creativity.

Annals of Human and Social Sciences (AHSS) January-March,2024 Vol 5, Issue 1 635 (Khan &Javed, 2020). Khan, M., &Javed, S. (2020). Intellectual property rights in Pakistan: Challenges and opportunities. Pakistan Law Journal, 6(4), 35-50.

As Pakistan has been a member of WIPO since 1977, this legislation establishes the Intellectual Property Office (IPO), which is responsible for the registration and enforcement of intellectual property rights. Educating the public, inventors and the innovators about intellectual property rights is another responsibility of the IPO.

Pakistan joined the Madrid System of International Registration Trademarks, on 24 February 2021. Pakistani trademark holders will now able to protect their trademark in over 100 countries, according to the Madrid System, by filing a single application at WIPO through IPO Pakistan. The business community of the member countries will also be able to get the protection of their trademarks in Pakistan by using the Madrid System. It is a win-win situation for traders of both Pakistan and its trading partners. The behind plan is to get the protection of Intellectual Property Rights for the promotion of genuine businesses in their markets as well as the confidence-building of potential foreign investors. In the next step, Pakistan joined the Patent Cooperation Treaty (PCT), Marrakesh Treaty for VIPs and Lisbon Agreement (Geneva Act) for Geographical Indications. Joining of WIPO internet treaties and other WIPO agreements was considered at a later stage. In the modern world, ESG strategies of companies require these companies to invest in innovations that help the planet fight against social and environmental challenges.

In order to ensure that businesses are “SDG-friendly,” a Responsible Business Framework was developed in collaboration with the pertinent stakeholders. Departments within the Punjab government evaluate how each publicly-funded program will affect the SDGs. This allows the province to set priorities for programs that will have the greatest impact on SDGs 8, 7 and 9, which include energy efficiency, contemporary infrastructure development and attracting private investment, respectively. The Sialkot Chamber of Commerce & Industry (SCCI) and the Government of Pakistan worked together to build Sialkot International Airport, Pakistan's first publicly-owned privately-owned airport, so that local exporters could reach international markets more easily. Over the next five years, Pakistan hopes to increase its GDP by 5.8 percent. Reviewing the investment climate and removing growth-inhibiting obstacles are necessary for Pakistan to achieve SDG 8's objective of sustainable development. More funding for climate change mitigation, demand-based skill development to boost productivity, "ease of doing business" initiatives, economic documentation systems and worker security and dignity are all necessary for this kind of growth. To reach these goals, the government will emphasize labor-intensive technologies in its economic strategies, upgrade its technology and lead the innovation curve. It will also shift its focus to high-value products.

As a worldwide rallying cry to eradicate the poverty and safeguard the earth, the United Nations embraced the Sustainable Development Goals (SDGs) in 2015, sometimes referred to as the Global Goals. As a means to an end the realization of sustainability these might be considered as well. Furthermore, they made sure that by 2030, everyone will be able to live in wealth and peace. In order to achieve the SDGs, all UN member nations must work together and coordinate their efforts.

INTELLECTUAL PROPERTY RIGHTS ROLE TO ACHIEVE SDGS

Environmental impact:

SDG 9 addresses ‘Industry, Innovation and Infrastructure’. This emphasizes the need for technical advancement through the research and development, notably in production, manufacturing and infrastructure. Intellectual property, especially patents, encourages innovation. Patents give exclusive rights to inventions (WIPO, n.d.). It protects inventors and encourages the adoption of sustainable and efficient technologies to create a nation's physical capital. SDG 7 addresses ‘Affordable and Clean

Energy'. Clean energy comes from renewable sources like wind, solar, etc. Patents may safeguard and enhance solar, wind and grid integration technology (Pimputkar, 2025). Innovative solutions can make these technologies more affordable for the public. Only widespread public usage of these technologies can improve the environment. Green technology will also assist accomplish SDG 13 on 'Climate Action'.

Socio-economic impact:

Intellectual property protects the environment and improves people's lives. This helps accomplish SDG 3'Good Health and Well-being'. Patents aid pharmaceutical development and improve medical technology, equipment and medications. It improves therapy and is beneficial during pandemics. Intellectual property helped develop and distribute COVID-19 vaccinations.

The trademarks and design rights promote SDG 12 'Responsible Consumption and Production'. A trademark distinguishes one company's goods or services from another. It helps consumers select and use sustainable brands. Branded items guarantee quality and help buyers make educated purchases. Design rights allow manufacturers to preserve and create product designs that increase operational efficiency and user experience by maximizing resource usage. It boosts creativity and creates creative industry jobs (WIPO, n.d.).

CHALLENGES THAT IP BRINGS AND WAYS TO OVERCOME THEM

The intellectual property encourages research and the development of sustainable technologies. The fundamental difficulty it presents is the distribution of these technologies. It is difficult to fulfill the SDGs unless innovations are made available to everyone. Keeping innovations limited to a specific field and employing them solely for personal gain will undoubtedly impede progress toward sustainability. To ensure accessibility and equitable distribution of innovations, walking along the lines of SDG 17, 'Partnerships for the Goals', is essential. Licensing agreements, public-private partnerships, worldwide collaborations and agreements and other mechanisms can all be used strategically to deploy intellectual property. Businesses should focus on making use of sustainable practices that would help to make it a norm instead of an exception. Innovators, governments, private bodies and businesses work together to form a real and bigger impact. The collaboration is the key to making innovations accessible to the areas where they are needed the most.

RELATIONSHIP BETWEEN SDG AND ESG

From Corporate Strategies to Global Goals: How ESG and SDG Shape Our Sustainable Future

1. Understanding ESG & SDG:

While ESGs focus on corporate sustainability, guiding investment and business decisions, SDGs serve as a blueprint for addressing critical social, economic and environmental challenges.

2. Similarities & Differences:

Both frameworks have robust contributions to sustainability, stakeholder engagement and have a holistic approach to global issues. ESG is mainly corporate-driven and used for investment assessments, while SDGs serve as a broad global agenda with measurable targets.

3. Working Together for Sustainability:

Businesses may integrate their ESG initiatives with the SDGs, promoting accountability, transparency and significant impact. Companies that align their ESG goals with the SDGs make greater contributions to sustainability and global advancement.

4. Leveraging AI for ESG Reporting:

Companies such as BeWo use AI to track and minimize carbon emissions, directly supporting SDG 13 (Climate Action). Technology-driven solutions assure ESG compliance while providing exact impact tracking.

Finally, integrating ESG and SDG activities results in a unified sustainability roadmap in which firms, investors and governments collaborate to achieve a fairer and resilient future.

The United Nations' SDGs Promote Sustainable Investment

To promote sustainability, the 2015 UN SDGs address social, economic and environmental challenges. Firms and investors may connect their operations and investment plans with sustainable development concepts using the ESG framework.

Policy Research Journal
ISSN (E): 3006-7030 ISSN (P) : 3006-7022 Volume 3, Issue 10, 2025

ESG works with SDGs to encourage ethical, responsible, long-term investing. ESG investment assesses companies' environmental, social and corporate governance implications. These concerns increasingly influence investors' financial decisions to benefit society and the planet. Moral and impact-driven investment by millennials is altering global financial markets and making ESG-compliant enterprises more competitive.

Materiality assessments, stakeholder engagement and purpose and key objectives align corporate strategies with SDGs. Strategic integration makes sustainability actions relevant, quantifiable and connected to company performance. ESG investing is highly beneficial. It improves financial growth and long-term stability since ESG-focused companies perform better and are more robust to market downturns. It removes environmental and social risks and encourages transparency and accountability. Global sustainability commitment is expanding in the $4 trillion ESG investment market.

Integration of ESG-SDGs changes investing. Sustainable financial decisions may benefit society and reward investors. This relationship increases corporate responsibility and makes the global economy more equitable, sustainable and resilient.

Relationship between IPR, ESG and SDGs:

IPR, ESG frameworks and the UN's SDGs promote sustainable economic development, innovation and corporate responsibility. These three pillars encourage ethical governance, responsible innovation and global sustainability. IP protection promotes innovation, which helps achieve various SDGs. IPR promotes renewable energy (SDG 7), industry, innovation and infrastructure (SDG 9) and climate action (SDG 13) research by protecting innovations and creative works. Technology and global sustainability benefit from this protection. ESG, SDGs: ESG frameworks help organizations integrate environmental, social and corporate governance into their business strategies. SDGs like responsible consumption and production (SDG 12) and climate action (SDG 13) may create accountability, transparency and long-term value while supporting global sustainability. Strong IPR helps ESG projects. They support green technology, ethical business and long-term environmental and social safety. IP protection allows firms to invest in sustainable technology and practices. IPR, ESG and SDGs promote responsible firm growth. Strategic IP management and ESG principles help firms achieve SDGs, compete and profit. This convergence boosts innovation and makes the global economy fairer, more inclusive and greener.

Table 1: Variables of the relationship between IPR strategies and sustainable economic development in Pakistan:

Category	Example	Pakistan's Case	Solution
Strength of IPR Protection	USA & Germany: Strong IPR, high R&D	Weak enforcement discourages investors	Strengthen IPO Pakistan
Patent Registration Process	China: Faster patent approvals	Slow, bureaucratic patent process	Simplify application process, offer funding
Trademark & Copyright Laws	EU: Strong copyright laws	Rampant piracy, fake branded products	Stricter enforcement of copyright laws
Government Incentives for Innovation	South Korea: Tax incentives for R&D	Limited incentives for green tech startups	Subsidies for R&D, tax relief for patents

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Awareness & Education on IPR	Japan: Public awareness campaigns	Low awareness leads to IP theft	Train entrepreneurs & researchers on IP
Innovation & R&D Growth	India: Improved IPR, increased patents	Limited funding for R&D	University-Industry collaboration, R&D grants
Foreign Direct Investment (FDI)	Singapore: Strong IPR, attracts tech giants	Weak IP laws deter foreign firms	Enforce IPR laws to attract FDI
Economic Growth Indicators	Germany: Patent-heavy industries boost GDP	Reliance on low-tech exports limits growth	Promote high-tech industries via IPR policies
Job Creation in Knowledge-Intensive Industries	Silicon Valley: Strong IPR fosters startups	Weak IP discourages startup ecosystem	Encourage tech entrepreneurship
ESG Compliance in Businesses	Tesla: Patents battery tech for sustainability	Weak green patents, limited investment	Strengthen green patents, encourage sustainability
Sustainable Innovation Adoption	Denmark: Leads in renewable patents	Lack of clean energy patents	Financial incentives for green tech
Corporate ESG Strategies	Unilever: Patents sustainable packaging	Few firms prioritize ESG compliance	Encourage businesses to patent sustainable innovations
Technology Transfer & Knowledge Spillover	India: Strong IPR led to biotech partnerships	MNCs hesitate to share technology	Strengthen patent laws to boost technology transfer
Quality of Legal & Institutional Framework	Efficient courts resolve IP disputes	Weak judiciary discourages enforcement	Establish special IP courts
Market Competition & Counterfeiting Levels	High counterfeiting reduces innovation	Grey market harms legitimate businesses	Increase penalties for counterfeiting

Global Trade Agreements & Compliance	TRIPS compliance increases trade	IP laws not aligned with global standards	Align with TRIPS agreement
Political Stability & Government Policies	Political stability encourages FDI	Political uncertainty deters innovation investment	Develop long-term IPR protection policies

Counterfeit products and deception practices

Piracy and counterfeiting have played a significant role in undermining the foundations of Pakistani society. These evils have contributed to the deterioration of the education, health, food, technology and innovation sectors in Pakistan. IP criminals consider piracy and counterfeiting both profitable and easy tasks, deriving immense pleasure from committing these offenses. Ethics and moral values have vanished and greed for wealth has eroded our moral principles.

The government and intellectual property rights (IPR) holders suffer losses amounting to billions of rupees due to piracy and counterfeiting. Intellectual property and socio-economic growth go hand in hand and laws are drafted to protect IPRs. However, merely creating laws is not enough. The government cannot fulfill its responsibility simply by enacting legislation. This responsibility can only be effectively carried out when these laws are properly enforced.

Challenges and Impediments

Pakistan faces numerous challenges in ensuring effective protection and enforcement of Intellectual Property Rights (IPR), which hinders innovation and sustainable development. The country has a relatively low level of intellectual property protection, with widespread issues such as counterfeiting, piracy and unauthorized use of proprietary technologies. A major difficulty lies in the lack of public and creator awareness about intellectual property laws, coupled with an underdeveloped legal system and limited resources for enforcement. Although the IPO Pakistan Act (sections 13 and 14) assigns the organization the responsibility of promoting IP awareness through advocacy and education, these obligations are not being fully met. According to Saleem Ullah (2017), even occasions like World Intellectual Property Day pass largely unnoticed in Pakistan, reflecting weak societal engagement with IP issues.

Furthermore, while the IPO Pakistan Act 2012 mandates that IP offenses be tried by specialized tribunals, such courts exist only in Islamabad, Lahore and Karachi, leaving other regions like Peshawar and Quetta without proper judicial infrastructure. The lack of undergraduate IP education worsens the knowledge gap among appointed judges and personnel. Weak and non-deterrent penalties under the Copyright Ordinance 1962 and Trademark Ordinance 2001, plus the judiciary's considerable discretion, result in low fines and weak enforcement. The Geographical Indications (GI) and Genetic Resources, Traditional Knowledge and Folklore (GRTKF) laws are absent from Pakistan and enforcement committees only function in big cities. Police, FIA, PEMRA, FBR and Customs handle IP-related offenses uncoordinatedly, confounding complainants and limiting accountability. IPO-Pakistan's piracy and counterfeiting records are incomplete and low financing hampers capability compared to worldwide standards like the U.S. Patent Office. Weak governance, low IP priority relative to law, health and education and pirate tolerance harm IP protection. Pakistan's IP policy would continue to hinder innovation, fair competition and sustainable development goals without more knowledge, legal expertise, institutional cooperation and deterrent consequences.

Attempts to Strengthen the Intellectual Property Rights in Pakistan.

The Government of Pakistan has made many initiatives to improve intellectual property rights (IPR) protection, which is critical for supporting innovation and economic progress.

Key initiatives include:

- Establishment of the Intellectual Property Organization (IPO) and the creation of specialized IP courts.
- Implementation of modern IP laws, such as the Copyrights Ordinance (2001) and Trademarks Ordinance (2001).
- Public awareness campaigns to educate businesses and individuals on IPR significance.
- Creation of Pakistan Intellectual Property Institute (PIPI) to provide training and capacity-building programs for creators, innovators and the government officials.

Pakistan is one of the biggest affecters of the environmental changes

Regardless of Pakistan being heavily affected by environmental changes, it still recognizes the three core dimensions, social, economic and environmental, which require a comprehensive approach to policy formation.

In 2016, the national parliament took a significant step towards the clean energy by transforming the parliament house into a sustainable green building. It holds the distinction of being the world's first and largest solar-powered legislative building. This initiative sets an example for other private and government institutions beyond the concept of just reducing air pollution.

Pakistan joined the Paris Agreement in 2016 and agreed to the Doha Amendment to the Kyoto Protocol. To comply with these international commitments, Pakistan's Ministry of Climate Change (MoCC) amended the National Climate Change Policy (2012) and Implementation Framework 2014. This framework contains nearly 700 recommended actions, including 240 priority actions, divided into 380 short-term, 108 medium-term and five long-term initiatives.

Being a county prone to disasters, such as flash flood and extreme weather conditions, Pakistan has developed disaster management authorities at all three levels. These authorities are in charge of disaster risk reduction (DRR) and disaster risk management (DRM), coordinating emergency response activities and raising public knowledge about disaster preparedness. Pakistan's relationship with the United Nations strengthens these measures under Outcome 6 (Resilience) of the United Nations Sustainable Development Programme for Pakistan (2018-2022).

Pakistan also revised its Biodiversity Action Plan (2000) in 2016, to protect and conserve natural resources and introduced the National Forest Policy which was consisted of:

1. Mitigating and adapting to climate change effects while maintaining economic growth.
2. Integrating climate change policy into national development plans, especially the SDGs.
3. Forest management, biodiversity and wildlife conservation all require sustainable practices.
4. Controlling pollutants (air, noise, water and soil) and improving waste management.
5. Improving institutional capacity and knowledge among stakeholders, particularly women.
6. Economic and Social Sustainability Initiatives

To foster sustainable economic growth, Pakistan has outlined several strategic priorities aimed at boosting productivity, innovation and employment across key sectors. The government is boosting service industries like ICT and tourism to create jobs and attract foreign investment. The China-Pakistan Economic Corridor (CPEC) plan invests heavily in infrastructure to boost economic activity and connectivity. IT parks help Pakistan become a regional software and hardware innovation powerhouse. To alter the labor market, comprehensive skill development initiatives and worldwide recognition for Pakistani skill certificates are encouraging high-productivity, high-wage employment and assuring global employability. Strengthening agriculture, which employs most of the workforce and increasing financial inclusion to 50% of residents with commercial bank accounts are key goals. To support private sector tourist growth, the government is offering tax cuts and subsidized loans. Pakistan also wants to attract more foreign tourists by enhancing historical and archeological sites, reducing entrance hurdles and boosting resort accessibility. These policies promote inclusive growth, sustained employment and Pakistan's economic resilience.

Conclusion:
Pakistan must combine policy alignment, investment and institutional transformation for sustainable development and innovation-driven growth. Trade policy must comply with international norms, especially the TRIPS Agreement, to preserve intellectual property and boost competitiveness. The promotion of environmentally conscious and ESG-compliant corporate practices can contribute to sustainable industrial growth, while the increase in research and development (R&D) investments will foster innovation and promote technology-driven exports. Pakistan can foster long-term innovation and establish a global knowledge economy by successfully executing intellectual property laws. Pakistan ranks 91st out of 133 economies in the Global Innovation Index (GII) 2024, indicating moderate innovation capabilities but great room for development. The country outperforms its GDP and development level in high-tech imports (13th worldwide), mobile app production per billion PPP$ GDP (14th globally) and ICT service exports (22nd globally). These metrics show Pakistan's digital innovation and technology services growth. Pakistan must modernize its regulatory system, invest in digital infrastructure and strengthen intellectual property rights to improve its worldwide innovation rankings and enable equitable, innovation-led economic growth.

REFERENCES

Ahmed, D. N. (2021). Intellectual property rights and economic development: A case study of Pakistan. *Journal of Historical Studies, 7*(1), 157-174. Retrieved from https://jhs.bzu.edu.pk/upload/Vol-I-21_Article%20-9-Vol%207-1%20JHS.pdf_28.pdf

Butt, S. (2011). *Impediments in the implementation of intellectual property rights in developing countries* (Master's dissertation). Retrieved from http://theses.iiu.edu.pk:8002/gsdl

Ghulam, M., & Muhammad, G. (n.d.). The implementation of intellectual property laws in Pakistan - impediments and suggestions for solutions. *Pakistan Vision, 20*(1). Retrieved from file:///C:/Users/IBM/OneDrive/Desktop/5_v20_1_19.pdf

Intellectual Property Organization of Pakistan. (2017). *IPO initiatives for IPRs enforcement*. Retrieved from http://www.ipo.gov.pk/

Intellectual Property Organization of Pakistan. (2018). *IPO offices*. Retrieved from http://www.ipo.gov.pk/

Intellectual Property Organization of Pakistan Act. (2012). Retrieved from http://www.wipo.int/edocs/lexdocs/laws/en/pk/pk064en.pdf

Kango, R. (n.d.). *The United Nations SDGs and their impact on ESG investing. Sustainability Magazine*. Retrieved from https://sustainabilitymag.com/articles/united-nations-sdgs-and-their-impact-on-esg-investing

Lack of awareness about intellectual property rights. (2006, August 14). *Dawn*. Retrieved from http://www.dawn.com/news/205920

Maker, H. (2014, April 20). Intellectual property rights in Pakistan. *The Nation*. Retrieved from http://nation.com.pk/20-Apr-2014/intellectual-property-rights-in-pakistan

Masudi, D. J. A. (2023). Intellectual property law in Pakistan: Safeguarding creativity and innovation. *Pakistan Journal of International Affairs,* 6(2). Retrieved from file:///C:/Users/Admin/Downloads/70-intellectual-property-law-in-pakistan-safeguarding-creativity-and-innovation.pdf

Ministry of Law and Justice. (2017). *Intellectual property tribunal*. Retrieved from http://www.molaw.gov.pk/

Mufti, F. (2016, February 7). Lack of awareness on intellectual property rights. *The Express Tribune*. Retrieved from https://tribune.com.pk/story/1041731/lack-of-awareness-on-intellectual-property-rights/

Pimputkar, R. (2025, February 5). The role of intellectual property rights in achieving SDGs. *Jus Corpus Law Journal*. Retrieved from https://www.juscorpus.com/the-role-of-intellectual-property-rights-in-achieving-sdgs/

Punjab University Law College. (2017). *Programmes*. Retrieved from www.pulc.edu.pk

Saleem Ullah, M. (2017, April 26). Intellectual property rights in Pakistan. *Pakistan Observer*. Retrieved from https://pakobserver.net/intellectual-property-rights-pakistan/

Sheikh, M., & Khan, M. U. (2014). Understanding and developing Pakistan's intellectual property law framework. *Pakistan Vision, 20*(1). Retrieved from http://rsilpak.org/wp-content/uploads/2016/03/Intellectual-Property-Brief.pdf

United States Trade Representative. (2016). *2016 Special 301 report*. Retrieved from https://ustr.gov/

United States Trade Representative. (2017). *2017 Special 301 report*. Retrieved from https://ustr.gov/

WIPO. (n.d.). *Patents*. Retrieved from https://www.wipo.int/en/web/patents

WIPO. (n.d.). *Trademarks*. Retrieved from https://www.wipo.int/en/web/trademarks

World Intellectual Property Organization (WIPO). (n.d.). *About WIPO*. Retrieved from https://www.wipo.int/about-wipo/en/