

# Volume and Issues Obtainable at Centeriir.org Pakistan Journal of Criminal Justice ISSN: 2958-9363 ISSN (E): 2958-9371

Volume 2, No.1, 2022

Journal Homepage: https://journals.centeriir.org/index.php/pjcl

# The Development of Intellectual Property Laws in Pakistan: Challenges and Suggestions

Junaid Jan

Lecturer, Department of Law

The Islamia University of Bahawalpur

Junaid.jan@iub.edu.pk

#### **ABSTRACT**

This paper signifies the importance of Intellectual Property laws on the socioeconomic indicators of a developing country. It outlines the international legal framework and the role of international organizations in the protection and enforcement of intellectual property rights. The domestic legal framework of Pakistan and organizations of intellectual property are discussed and analysed. Descriptive research methods and a literature review are used to answer the research questions. The legal system of Pakistan is marred with a lack of awareness, lax and non-deterrent punishments, a lack of teaching and research facilities, and a lack of capacity building and officers that create hurdles in the implementation and enforcement of intellectual property laws in Pakistan in order to grow economically. Thus, the effective development of such laws is pertinent for the socio-economic growth of Pakistan. It has been concluded that Pakistan's legislation is not parallel with internationally prescribed standards. The lack of oversight and ceremonial role of IPO Pakistan is detrimental to the development of intellectual property laws in Pakistan. It has been suggested that IP law tribunals should be established in every division, and specialized force should be created to combat such crimes. Strict punishments should be awarded and the concerned officials and judges should be trained to develop an effective framework of intellectual property laws in Pakistan.

**Article History:** Received: August 30, 2022: Accepted: November 28, 2022 **Keywords:** Intellectual Property Rights, IP Laws, IP laws in Pakistan

## 1 Introduction

Intellectual Property is defined as anything created with intellect, thought and mind. It encompasses all intellectual works, designs, logos, creative or aesthetic creations, innovations, etc. Industrial property and copyrights are two types of intellectual property; the former includes trademarks, patents, logos and designs, whereas artistic creations such as poems, prose, designs, monuments, paintings, and literary creations are examples of copyrights. It protects content creators, television broadcast and radio directors, artists in the performance, and phonogram makers against piracy and counterfeiting (Ali 2011). The purpose of intellectual property rights is to reward the creator of the work (Naveed Ahmed, Bakht Munir, and Ali Nawaz Khan 2021).

A nation cannot progress in modern economies without the protection of intellectual property rights (Alikhan 2000). All the stakeholders including lawyers, scholars and economists are concerned with figuring out how much development of Intellectual property rights in the country is significant for the economy of a country. Even though there is a paucity of information on this critical subject and its authenticity might be questioned, it remains a priority. International institutions such as World Trade Organization, World Intellectual Property Organization (WIPO), and the World Bank have gathered data from developed economies and made accurate deductions. However, the information and statistics collected from developing countries are unreliable, limited and unauthentic.

The unprejudiced, and effective implementation of Intellectual Property laws attracts new investment and innovation, whilst the weak implementation of such laws promotes counterfeiting, and piracy and thus acts as a hindrance to trade, employment, investment in research and development and the overall economic growth of the country (Park and Ginarte 1997). Unfortunately, Pakistan suffers from the lack of implementation of Intellectual Property laws. The study deals with the challenges in the application of Intellectual Property laws in Pakistan. It concludes by making suggestions and recommendations for the stringent application of intellectual property laws in Pakistan.

#### 1.1 Research Ouestions

This research addresses the following research questions.

- 1. What impact do intellectual property laws have on the economic growth of a nation?
- 2. What is the legal framework of Intellectual Property Laws in Pakistan?
- 3. What are the challenges in the effective implementation of Intellectual Property Laws in Pakistan?

# 1.2 International Legal Framework on Intellectual Property Rights

On the international front, Intellectual Property rights are protected under various general and special covenants. According to Article 15(1)(c) of 'The International Covenant on Economic, Social and Cultural Rights (ICESCR)', the signatory nations to the Covenant acknowledge the right, "To benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author". 'The Universal Declaration of Human Rights 1948 (UDHR)', which served as a conceptual foundation for many other international legal instruments, also provides a framework for intellectual property. Article 27(2) of UDHR states that "Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author." (Maira Sheikh and Moghees Uddin Khan 2014)

Intellectual property is a relatively modern concept of property and developed around the world in the  $20^{\text{th}}$  century. The United Nations established the 'World Intellectual Property Organization (WIPO)' in 1967 through the WIPO convention. It is the only dedicated agency for the protection of intellectual property rights on an international level. The main objective of its member nations is to promote the global protection of intellectual property by combining the efforts of governments and international organisations (M. Blackman 2003). 'The Paris Convention for the protection of Industrial Property 1883' is the most significant and primitive covenant in the history of Intellectual Property. It recognised the related rights and prioritized the protection of industrial designs, patents and trademarks. In addition, an International Bureau was also established to oversee the implementation of the Paris convention. The historic 'Berne Convention for the Protection of Literary and Artistic Works' was established in 1886 as a followup to the Paris Convention in order to provide intellectual property rights with a worldwide standing and to bring IPR-related legislative measures into line. Likewise, an international bureau was also established to manage the Berne Convention. Later, in 1983, these international bureaus were merged into a single International Organization called 'Bureaux Internationaux Reunis Pour La Protection de La Propriete Intellectuelle (BIRPI)'. Subsequently, this BIRPI was transformed into WIPO, a more powerful, effective and expansive organization. Given the current significance of Intellectual Property rights, the WIPO has currently 184 member states and administers twenty-four international treaties.

The main objective of the WIPO is to promote the importance and significance of intellectual property rights among the member states. Another important goal of WIPO is the development of regulations and policies for the enforcement of intellectual property laws worldwide. It not only forges relations between the member states but also offers a sound legal framework for emerging issues affecting intellectual property rights. Lastly, the objective of the WIPO is to provide Alternative Dispute resolution to the member states. The mediation and arbitration centres of WIPO have extended their purview to address disputes between the parties, individuals or countries resulting from the improper use of domains on the internet.

#### 1.3 Economic Development and Intellectual Property Rights

To elaborate on the importance of Intellectual Property, it must be understood beforehand that only those nations stand out in the global economy that has effective enforcement and protection mechanism of Intellectual property

rights. Multi-national companies consider such countries as desirable locations for doing business and supporting their economic growth (HL Berstein 2006). The economic growth of a country is significantly influenced by the legal framework of Intellectual Property. There is no question that the protection of intellectual property is important for economic development and aids companies in recovering the costs of their innovative expenses. Thus, it is necessary to develop effective systems of intellectual property laws for the socio-economic well-being of a country (Kaushik Laik 2005).

In Pakistan, the violations of intellectual property laws have impacted the economic and social growth of the country. Every sector of the country including health, education, food, innovation and technology has been affected by these crimes. Piracy and counterfeiting are the major concerns as the offenders find these methods profitable ad commit them with immense pleasure. Moral values and ethics are no longer present as they have been hollowed by wealth and greed. Due to such rampant crimes of counterfeiting and piracy, the Government have to suffer the loss of billions. The socioeconomic growth of the country depends upon the effective legislation and implementation of intellectual property laws in a country (Elahi 2013). The obligation of the Government is only fulfilled when these laws are implemented in their true sense. Socio-economic growth only boosts the society that can put these laws into effect. Thus, developed countries have suitable and effective implementation mechanisms of intellectual property laws that result in the economic growth of the country (Ostergard, 2000). It encourages innovation which leads to economic growth and development (R.T. Rapp and R.P. Rozek 1990).

Despite an effective institutional framework and legal structure, the capacity of implementation is significantly low in Pakistan which results in stagnant economic growth. Here, we analyse the impediments that have made it difficult for Pakistan to enforce its intellectual property laws. The implementation of such laws can be made more effective by overcoming certain barriers (Sukarmijan and Sapong 2014).

# 2 Intellectual Property Rights in Pakistan

Pakistan is a country with a dense population and a faltering economy. If all of the counterfeiting and pirated industries are seized, the prices of goods will ultimately rise to make them unavailable for the majority of the population. A large percentage of the population strives to meet the necessities of life. Pakistan has a low literacy rate, and the struggle of the populace to meet ends leads to corruption and involvement in criminal activities. In the current scenario, an effective legal mechanism for intellectual property rights will not provide an immediate rise to the economy of Pakistan. Pakistan's current legal system is capable of handling crises and legal doctrines can rectify the ambiguity in laws. Thus, instead of creating new legislation, it is imperative that the current laws be implemented effectively (International Intellectual Property Alliance 2008).

According to 'International Intellectual Property (IIP)', the Government of Pakistan is lenient to impose any stringent measures and laws to fight piracy in the country as Pakistani publishers compete with the global pirated market. The report also gives a brief overview of software piracy, piracy network as well as the implementation strategy in the judicial system of Pakistan. However, Pakistan has enacted and amended intellectual property laws to align its legal framework according to international obligations outlined in the TRIPS agreement(International Intellectual Property Alliance 2008). Despite these efforts, the infrastructure of Pakistan is still marred with challenges of the exponential growth of piracy causing the county's economy to suffer (Naveed Ahmed et al. 2021).

One possible explanation is that existing legislative loopholes have been aggravated by a lack of oversight of regulatory bodies, lack of implementation of laws, and lenient sentences. Moreover, the sanctions and punishments are insufficient to prevent criminal activity. In comparison to the massive piracy industry, the fines imposed on the convicts are quite nominal. For instance, a person booked with a such offence can be sentenced to maximum imprisonment of three years and a fine of five thousand rupees. Whereas, the implementation of laws is ineffective and the litigation process is expensive and time-consuming. The report also suggests that the Government of Pakistan should work and correspond together with international organizations in order to overcome piracy. It further suggests that in lieu of the Investment Framework Agreement of 2003, the United States should exert pressure on the Government of Pakistan to implement effective measures to protect the violations of intellectual property rights (de Beer 2016).

In Pakistan, there are independent courts to settle the disputes of intellectual property and they need more autonomy to dispense the matters swiftly. In this respect, the national authorities of Pakistan should also develop an arbitration system.

# 2.1 Tribal Regions under the Imperial Form of Government

The Intellectual Property Organization Pakistan Act 2012 (hereinafter IPO Pakistan Act) is major legislation dealing with this issue, but unfortunately, the act itself is marred with several issues and a lack of implementation. According to Section 18 of the IPO Pakistan Act 2012, read with section 2(h) and the given schedule, the offences under the following acts will be exclusively tried by intellectual property tribunals (hereinafter IP tribunals):

- (i) 'The Trademarks Ordinance, 2001
- (ii) The Copyrights Ordinance, 1962
- (iii) The Patents Ordinance, 2000
- (iv) The Registered Designs Ordinance, 2000
- (v) The Registered Layout Designs of Integrated Circuits Ordinance, 2000
- (vi) Pakistan Penal Code, 1860 (Sections 478-489)'

The current issue that persists is whether the above-mentioned IP tribunals have been established or not. Such tribunals are only working in Islamabad, Karachi and Lahore (Anon 2017a). However, other metropolitans such as Quetta and Peshawar do not have these specialized tribunals. This discriminatory attitude makes it evident that the Government of Pakistan is not prioritizing the implementation of Intellectual Property laws. Another pertinent question arises whether the presiding judges of such courts are well acquainted with the intricacies of IP laws or not. Unfortunately, the presiding judges of such courts and tribunals have no expertise in IP laws, as they are simple Law graduates with no compulsory course in Intellectual property laws during their LLB. Moreover, the prosecution also lacks the capacity to handle such cases. Although the establishment of Intellectual Property Tribunals in Islamabad, Karachi and Lahore is a development in the right direction the effectiveness of such tribunals is yet to be seen (United States Trade Representative (2017) 2017).

## 2.2 Role of Intellectual Property Organization

Intellectual Property Organization in Pakistan (hereinafter IPO) has a significant role in the implementation and enforcement of IP laws in Pakistan. According to section 13(xvii) of the IPO Pakistan Act 2012, it is the responsibility of the Intellectual Property Organization Pakistan to propose and introduce enactments and amendments for the protection of intellectual property laws in Pakistan. However, it appears that this organization is not fulfilling its responsibility mandated by law. There are laws governing patents, designs, integrated circuit layout designs, and copyrights, but there aren't any yet for 'Genetic Resources, Traditional Knowledge and Folk Ware (GRTKF)'. The fact that some offences of IP are penalized and some are not is a major obstacle in the implementation of such laws in Pakistan.

According to section 13 (xviii) of the IPO Pakistan Act, it is the responsibility of IPO Pakistan to protect and initiate the implementation of IPRs. IPO Pakistan is also mandated to collect data and information regarding the instances of IPRs implementation. In this regard, comprehensive data on the violations of IPRs such as counterfeiting and piracy is not available. On the website of IPO Pakistan, an incomplete, irrelevant, and vague date is available which is difficult to understand and interpret the exact situation of counterfeiting and piracy violations. In order to inform the general public, judges and lawyers of IPO tribunals, no data regarding the already decided cases is available.

#### 2.3 Enforcement Mechanism in Pakistan

At the operational level, the agencies that work in coordination for the enforcement of IP laws are FBR, FIA, Police, Pakistan Customs, and PEMRA. But this enforcement chain is only restricted to Karachi, Lahore and Islamabad. In

the official meetings of IPR enforcement coordination Committees, the 'Federation of Pakistan Chambers of Commerce and Industry', the 'Overseas chamber of commerce and industry', the 'anti-counterfeit and infringement forum' and the 'Pakistan industrial rights association' are invited to devise an inclusive legal framework for the enforcement of IP laws (Anon 2017b). The issue at hand is whether the detrimental effects of counterfeiting and piracy are limited to Lahore, Islamabad, and Karachi. Other major cities of the country have no enforcement coordination committees as they are an exception. Secondly, a common man is unaware of the process to initiate a criminal proceeding against a counterfeiter and how to lodge a complaint of any IP crime. If any person wants to file a complaint, should he go to FIA, PEMRA, Police, Pakistan customs, IPO or FBR? He is unsure about the exact forum due to a lack of awareness and loopholes in the legislation. Currently, there exist specialized forces such as excise police, Anti-terrorism force, and Dolphin force, but lack IP police or force to handle cases regarding the violation of intellectual property laws and should pace up the enforcement activities.

The IPO Pakistan is headquartered in Islamabad, with a regional office in Lahore. While the copyright office, Patents office, and the Trademarks Registry are in Karachi. Another Regional Office was also established via notification in April 2018 but there is no such office in Quetta (Anon 2018). The main obstacle to the enforcement of IP laws is the absence of offices at every division level.

The Laws relating to intellectual property in Pakistan have a relatively narrow definition of an offender. A person is said to have violated the provisions of Copyright Ordinance 1962 if he has recreated and distributed the pirated goods(Maira Sheikh and Moghees Uddin Khan 2014), but the Act does not provide punishment for the consumer of such pirated products. Similar to this, the Trademarks Ordinance 2001 also penalises persons who apply for a false trademark, not those who sell those falsely trademarked goods. Thus, the successful implementation of IP laws cannot be ensured in the absence of deterrent punishments for consumers.

In order to encourage the public, scientists, inventors or engineers to benefit from the advancement of science with regard to the given invention, the rights of patents are granted exclusively for 20 years for an invention. It takes a lot of time, money and effort to conduct extensive research to invent anything. Patent rights can help in gaining economic benefits because the knowledge presented in the form of the invention can be used by anyone for further research (Li and Correa 2009). In *Smithkline and French Laboratories Limited v. Ferozsons Laboratories Limited* 1992 MLD 2226, the Sindh High Court held the defendant failed to establish the claim that their drug was produced using a method other than that of the plaintiff. This case illustrates that Pakistani courts are willing to grant absolute patent protection if deemed necessary. Trademarks are also a pertinent form of intellectual property and it is an efficient tool for traders to distinguish their goods from others in the trade. In many cases, it has been observed that a trademark is not only the protection of a trader but also benefits the general public. It holds the trademark holder responsible for the quality and grade of the goods provided under his trademark (James V. DeLong 2005). Moreover, the pharmaceutical sector provides a clear illustration of a trademark serving the public interest. As the identical generic names of drugs have confused and facilitated the market for substandard and counterfeit drugs. The Drugs Act 1976 demands the registration of simple and compound drugs under the names of their proprietary (Desai, Foley, and Hines 2004).

# 3 Challenges in the Implementation of Intellectual Property Laws in Pakistan

#### 3.1 Lack of Awareness

One of the primary obstacles to the implementation of IP laws in Pakistan is the lack of information and awareness. The majority of Pakistanis are unaware of the concept and rights associated with the term. Section 13 of the IPO Pakistan Act 2012 states that the organization must aware of the masses of the public and private domain regarding Intellectual property rights through print and electronic media. While under section 14, the organization is also responsible to raise awareness of intellectual property via advocacy. Regrettably, IPO Pakistan has failed significantly to perform its duty of raising awareness. Although, 26<sup>th</sup> of April is observed as World Intellectual Property Day since 2000 to recognize the role of intellectual property rights in promoting creativity and innovation in society. It also highlights the importance of patents, trademarks, designs, and copyrights, and their significant impacts on the economic sector of the country (M. Saleem Ullah 2017). Only a few people notice its importance and acknowledge its relevance but most people pass it like another ordinary day. In Pakistan, the society is far behind in literacy, R&D, innovation, economic development and intellectual property rights (F. Mufti 2016).

#### 3.2 Non-Deterrent Punishments

In the legal framework of Pakistan, the punishments of IP laws are not harsher and thus are non-deterrent. Due to lenient and lax punishments, the public does not take these offences seriously. The law provides wide discretion to the judge in these matters and they exercise their discretion by imposing trivial fines (United States Trade Representative (2016) 2017).

# 3.3 Lack of Research and Training Facilities

Another major challenge in the effective implementation of IP laws in Pakistan is the absence of teaching facilities and research in educational institutes. In Pakistani universities, there is a paucity of qualified faculty to teach Intellectual property rights and outdated syllabi and teaching materials. At the graduate level, IP law is not taught as a compulsory subject to the students pursuing law in Pakistan. Although few universities are offering this course at the post-graduate level such as the Punjab University Law College is offering a post-graduate diploma in Intellectual property laws. Thus lack of research, poorly qualified faculty and unavailability of courses at the university level are impediments to the development and implementation of Intellectual Property laws in Pakistan (Ghulam Muriza and Ghous Muhammad 2019).

# 3.4 Lack of Capacity Building

A significant hurdle in the enforcement of IP laws is the lack of capacity building of the institutions mandated to oversee their implementation. It has been observed that the capacity building of the officials of dedicated organizations i.e., IPO is somehow satisfactory, but law enforcement agencies and judiciary are deficient in this regard. In the USA, the annual budget allocated for the Patent and Trademark office is 1 billion dollars as there are 600 judges and 3000 professionals in this office that are specifically trained to deal with the cases of Intellectual property (Maira Sheikh and Moghees Uddin Khan 2014). Unfortunately, Pakistan spends a trivial amount and resources to aware the masses about the importance of Intellectual property and develop the capacity of its officials.

# 4 Suggestions

## 4.1 Intellectual Property Laws Tribunal

Given the severity of counterfeiting and piracy offences in the economy of the country, the IP tribunals should be created at district and divisional headquarters and most importantly in Peshawar and Quetta for the protection of IP rights. The presiding officers of such tribunals should have the required expertise and knowledge of Intellectual property. In case of the dearth of advocates and judges with the required expertise in Intellectual property laws, the experts of the IP should also be made part to assist the presiding judge of these tribunals.

It is essential for the effective implementation and enforcement of intellectual property laws in Pakistan to develop the capacity and human resources of the IP enforcement wing, the judiciary, the IP prosecution wing and the judicial staff of IP tribunals.

#### 4.2 Strict Punishments

It has been explained earlier, that the nominal fines in the cases of IP laws violation are non-deterrent. It has been a major cause of the lack of effective implementation of such laws. Thus, the legislature must enact stringent laws and the judiciary to punish such criminals with exemplary punishments. The IP laws in Pakistan should also be amended to enhance their enforcement, implementation and punishments. The judiciary's discretion in imposing fines in the cases of violation of IP laws be limited through amendment. This measure will have a deterrent effect on society as counterfeiters and pirates will think hundred times before committing such crimes.

Moreover, the implementation will remain a utopian dream as long as consumers continue to buy counterfeiting and pirated goods and services. Thus, it is pertinent to amend The Copyrights and trademarks ordinance to penalize a consumer for buying such products.

## 4.3 Formation of a Specialized Force

Owing to the massive impacts of IP law violations on the economic and social domains of any country, it is pertinent to establish a specialized force in Pakistan to combat this menace. The creation of an IP force and Police is inevitable

in current circumstances due to the prevalence of piracy and counterfeiting offences in Pakistan. It is expected that industrialised nations contribute funds to Pakistan if it takes efforts to establish a specialized force to protect against the violation of IP laws.

# 4.4 IP teaching Facilities

At the undergraduate level, the course of Intellectual Property must be made part of the LLB syllabus as a compulsory subject. The Pakistan Bar Council (PBC), Provincial Bar Councils and HEC can play their role in this regard. At the post-graduate level, specialization programs should be offered at universities, most importantly an LLM program in IP laws. This will encourage and promote research regarding the intricate issues of Intellectual Property. Both the teaching resources and facilities must align with international standards, and experts of IP may be inducted into universities as faculty members.

## 4.5 Spreading Mass Awareness

A nationwide campaign should be initiated to raise awareness regarding the significant impacts of the implementation of Intellectual property laws on the socio-economic indicators of a country. The initiative should be taken in both developed areas with established commerce industries and underdeveloped areas with small business enterprises to equally benefit from it. All forms of media such as print, electronic and social media can be employed to achieve this goal. Workshops and seminars should be held in concerned offices, chambers of commerce, government departments and universities. The renowned personalities of the field should be invited as speakers to spread the value of intellectual property. Advertisements and billboards with messages to safeguard Intellectual property should be displayed and posted on public places or highways, and leaflets, brochures and pamphlets of such material should be disseminated to the general public. World Intellectual Property Day should be observed with zeal and zest and great enthusiasm nationwide. In order to encourage innovators and inventors, awards and prizes should be given for their encouragement. This nationwide awareness program must be inclusive and structured in such a way as to educate even a layman regarding the severity of counterfeiting and piracy and the significance of Intellectual Property. Thus, a buyer or consumer can make a wise choice regarding the reliability, effectiveness and safety of his purchases (Ghulam Muriza and Ghous Muhammad 2019).

In order to intimate the general masses regarding violations of IP laws and the performance of Law enforcement agencies, the information should be disseminated on monthly basis on digital and print media. A journal should also be published incorporating the case laws and jurisprudence developed by intellectual property tribunals and Higher Courts to educate the public, judges and lawyers.

## 5 Conclusion

In the light of above elaboration, it can be ascertained that the significance of Intellectual Property is persistently ignored in Pakistan. This indifferent attitude of policymakers resulted in socioeconomic loss. The lack of stringent laws and policies for the protection of intellectual property rendered multi-national companies, and international investment to recede. Modern economies cannot afford to lax their laws for the infringement of intellectual property rights due to their diverse impacts on every stratum of society. Pakistan is also a signatory of all international organizations that provide an effective framework for IP laws and their protection but Pakistan has been very ignorant in devising stringent policies, laws and institutions.

The role of intellectual property rights in the economic development of a country is very vital, thus such violations in Pakistan must be addressed to prosper on the economic front. The Piracy and counterfeiting have caused a loss of billion of rupees to foreign and local investors. Although some measures have been taken by the Government, and some institutions have also been established but the results are not impressive. The Trademarks Ordinance 2001, the Patents Ordinance 2000, the registered Designs Ordinance 2000, and provisions of the Pakistan Penal Code 1860 are outdated and do not cater to the needs of modern intellectual property rights violations. The Intellectual Property Organization of Pakistan is also striving to curtail the prevalence of the infringement of Intellectual Property rights. In modern times, IPO plays an important role to implement the policies of the Government in true letter and spirit.

On the enforcement front, the lack of proper enforcement mechanisms has always been a great problem. There is no specialized force to investigate and prosecute such crimes since several law-enforcement agencies are mandated to

investigate and prosecute intellectual property laws. In Pakistan, several challenges are faced while enforcing intellectual property laws. Lack of awareness of such rights and the drastic impacts of their violation are major challenges that render it impossible to implement IP laws. Moreover, capacity building of institutions, Research and resources are equally important. Despite all these inherent issues and challenges, strict punishments, the formation of a specialized force to counter IP violations, and the spreading of mass awareness can help immensely to counter this socio-economic menace.

#### References

Ali, Muhammad Hamid. 2011. 'The Protection of Geographical Indications in Pakistan: Implementation of the TRIPS Agreement: The Protection of Geographical Indications in Pakistan'. *The Journal of World Intellectual Property* n/a-n/a. doi: 10.1111/j.1747-1796.2011.00427.x.

Alikhan, Shahid. 2000. Socio-Economic Benefits of Intellectual Property Protection in Developing Countries. Geneva Switzerland: WIPO.

Anon. 2017a. 'Intellectual Property Tribunal'. *Ministry of Law and Justice*. Retrieved 9 December 2017 (http://www.molaw.gov.pk/).

Anon. 2017b. 'IPO Initiatives for IPRs Enforcment'. *Intellectual Property Organization of Pakistan*. Retrieved 25 October 2022 (http://www.ipo.gov.pk/).

Anon. 2018. 'IPO Offices'. *Intellectual Property Organization of Pakistan*. Retrieved 20 October 2022 (http://www.ipo.gov.pk/).

de Beer, Jeremy. 2016. 'Evidence-Based Intellectual Property Policymaking: An Integrated Review of Methods and Conclusions'. *The Journal of World Intellectual Property* 19(5–6):150–77. doi: 10.1111/jwip.12069.

Desai, Mihir A., C. Fritz Foley, and James R. Hines. 2004. 'Foreign Direct Investment in a World of Multiple Taxes'. *Journal of Public Economics* 88(12):2727–44. doi: 10.1016/j.jpubeco.2003.08.004.

Elahi, Manzoor. 2013. 'Role of Intellectual Property Protection on the Economy'. SSRN Electronic Journal. doi: 10.2139/ssrn.2402891.

F. Mufti. 2016. 'Lack of Awareness on Intellectual Property Rights'. *The Express Tribune*, February 7.

Ghulam Muriza and Ghous Muhammad. 2019. 'The Implementation of Intellectual Property Laws in Pakistan-Impediments and Suggestions for Solutions'. *Pakistan Vision* 20(1):1–8.

HL Berstein. 2006. The Role of Intellectual Property in Building Economic Strength in Developing Countries. Intellectual Property Today.

International Intellectual Property Alliance. 2008. *IIPA's 2008 Special 301 Report Special 301 Report*. Copyright Protection and Enforcement Around the World Around the World. U.S. Trade Representative.

James V. DeLong. 2005. 'The Importance of Intellectual Property for Information Technology Development in the Less-Developed World'. *The Progress and Freedom Foundation*. Retrieved 25 October 2022 (http://www.pff.org/issues-pubs/ps/2005/ps1.22vietnam.html).

Kaushik Laik. 2005. 'Role of Intellectual Property in Economic Growth'. *Journal of Intellectual Property Rights* 10:465–73.

Li, Xuan, and Carlos María Correa, eds. 2009. *Intellectual Property Enforcement: International Perspectives*. Cheltenham, UK; Northampton, Mass: Edward Elgar.

M. Blackman. 2003. 'Intellectual Property: A Power Tool for Economic Growth'. World Patent Information 25(4):359–60.

M. Saleem Ullah. 2017. 'Intellectual Property Rights in Pakistan'. Pakistan Observer, April 26.

Maira Sheikh and Moghees Uddin Khan. 2014. 'Understanding and Developing Pakistan's Intellectual Property Law Framework'. *Research Society of International Law Pakistan*.

Naveed Ahmed, Bakht Munir, and Ali Nawaz Khan. 2021. 'Intellectual Property Rights and Economic Development: A Case Study of Pakistan'. *Journal of Historical Studies* VII(1):157–74.

Ostergard, Robert L. 2000. 'The Measurement of Intellectual Property Rights Protection'. *Journal of International Business Studies* 31(2):349–60. doi: 10.1057/palgrave.jibs.8490911.

Park, Walter G., and Juan Carlos Ginarte. 1997. 'INTELLECTUAL PROPERTY RIGHTS AND ECONOMIC GROWTH'. *Contemporary Economic Policy* 15(3):51–61. doi: 10.1111/j.1465-7287.1997.tb00477.x.

R.T. Rapp and R.P. Rozek. 1990. 'Benefits and Costs of Intellectual Property Protection in Developing Countries'. *Journal of World Trade* 24:75–102.

Sukarmijan, Sati-Salmah, and Olivia De Vega Sapong. 2014. 'The Importance of Intellectual Property for SMEs; Challenges and Moving Forward'. *UMK Procedia* 1:74–81. doi: 10.1016/j.umkpro.2014.07.010.

United States Trade Representative (2016). 2017. 2016 Special 301 Report.

United States Trade Representative (2017). 2017. 2017 Special 301 Report.