



Emerging Issues of IPR in Developing and Under Developed Countries

Khagendra Kumar¹; Salim Jawed²

¹Dean, Faculty of Education & Former Registrar, Patna University, Patna, India

²Asst. Professor, Department of Law, Patna University, Patna, India

E-mail: khagendra41@yahoo.co.in

<http://dx.doi.org/10.47814/ijssrr.v7i10.2379>

Abstract

Intellectual Property Rights (IPR) are pivotal in driving innovation, creativity, and economic growth globally. However, they also pose significant challenges, particularly for developing and underdeveloped nations. IPR can hinder access to essential goods, such as medications, educational materials, and agricultural technologies, exacerbating inequalities and stifling local innovation. The monopolistic control of IPR by developed countries often leads to economic dependency and limits knowledge sharing crucial for addressing global challenges like climate change and public health. To mitigate these issues, a multifaceted approach is required, including strengthening legal frameworks, empowering communities, promoting technology transfer, and fostering international cooperation. Reforming the current IPR regime to ensure equitable access and benefit-sharing can harness the potential of intellectual property for sustainable development and global prosperity.

Keywords: *Intellectual Property Rights (IPR); Developing and Underdeveloped Countries; Inclusive Development; Agriculture; Health; Education*

Introduction

Significance of IPR

Intellectual Property Rights (IPR) serve as the cornerstone of modern economies, playing a pivotal role in fostering innovation, creativity, and economic growth. At its core, IPR refers to legal rights that protect intangible assets resulting from human creativity and ingenuity, including inventions, artistic works, trademarks, and trade secrets (WIPO, n.d.). The significance of IPR permeates various sectors and has far-reaching implications for individuals, businesses, and societies worldwide.

First and foremost, IPR incentivize innovation and creativity by providing creators and inventors with exclusive rights over their creations. This exclusivity enables them to reap the rewards of their labor, encouraging investment in research and development across diverse fields such as technology,

pharmaceuticals, entertainment, and design (Landes & Posner, 2003). Patents, copyrights, and trademarks offer legal protection, giving innovators the confidence to invest time, resources, and expertise into developing new products, processes, and services. This innovation-driven economy fuels progress, drives competitiveness, and enhances overall societal welfare (Maskus, 2000).

Moreover, IPR facilitate technology transfer and dissemination, driving global collaboration and knowledge sharing. Patents, in particular, serve as a catalyst for technology transfer by incentivizing inventors to disclose their inventions in exchange for exclusive rights for a limited period (Jaffe & Lerner, 2004). This exchange of knowledge fosters collaboration between academia, industry, and government, accelerating the pace of innovation and fostering the spread of technology across borders (Romer, 1990). Through licensing agreements and strategic partnerships, businesses can leverage IPR to access new markets, expand their reach, and capitalize on emerging opportunities (Arora, Fosfuri, & Gambardella, 2001).

In addition to promoting innovation and technology transfer, IPR play a crucial role in fostering economic development and wealth creation. Strong IPR protection attracts investment, fosters entrepreneurship, and stimulates economic growth by creating a conducive environment for businesses to thrive (Park & Lippoldt, 2008). Start-ups and small enterprises can leverage their intellectual assets to secure financing, attract talent, and establish a competitive edge in the market (Hall & Harhoff, 2012). Furthermore, IPR enhance the value of brands and reputation, enabling businesses to differentiate themselves, build customer loyalty, and command premium prices for their products and services (Aaker, 1991).

Beyond the economic realm, IPR safeguard cultural heritage, preserve traditional knowledge, and promote artistic expression. Copyrights protect literary and artistic works, ensuring that creators receive recognition and compensation for their contributions to culture and society (Lessig, 2004). Trademarks safeguard brands and identities, preserving the reputation and authenticity of products and services (Economides, 1988). By protecting cultural expressions and indigenous knowledge, IPR contribute to the preservation of cultural diversity and promote respect for cultural rights and heritage (Posey & Dutfield, 1996).

However, while IPR offer numerous benefits, they also present challenges and controversies, particularly regarding access to essential goods, technology, and knowledge. Balancing the need for innovation incentives with the imperative of ensuring access to healthcare, education, and essential technologies remains a critical challenge for policymakers (Stiglitz, 2006). Moreover, concerns about patent thickets, patent trolls, and abusive litigation highlight the need for effective IPR enforcement mechanisms and regulatory frameworks that strike a balance between protection and competition (Shapiro, 2001).

Finally, the significance of Intellectual Property Rights cannot be overstated in today's knowledge-driven economy. By incentivizing innovation, fostering economic development, and preserving cultural heritage, IPR serves as a catalyst for progress and prosperity. However, addressing the challenges and complexities associated with IPR requires a nuanced approach that balances the interests of creators, consumers, and society as a whole. Through effective policymaking, international cooperation, and stakeholder engagement, the full potential of IPR can be realized to drive sustainable growth, promote human creativity, and advance the collective well-being of humanity.

Idea of Inclusive Development and Free Flow of Knowledge and Knowhow Across the Global Village and IPR

In the era of globalization and the knowledge economy, the idea of inclusive development and the free flow of knowledge and know-how are cherished as fundamental principles for fostering prosperity

and addressing global challenges. However, Intellectual Property Rights (IPR) present significant challenges to achieving these objectives, particularly in the context of creating a truly inclusive and equitable global society.

One of the primary issues with IPR in the pursuit of inclusive development is the potential barrier they create to the free flow of knowledge and innovation. Patent and copyright laws, while designed to incentivize creativity and innovation, can sometimes hinder the dissemination of essential information, technologies, and cultural expressions. This barrier can impede progress in fields such as healthcare, education, and environmental sustainability, limiting access to life-saving medications, educational resources, and clean technologies, particularly in developing and underdeveloped regions (Stiglitz, 2006).

Moreover, the unequal distribution of IPR benefits exacerbates existing global inequalities. Developed countries and multinational corporations often hold the majority of patents and copyrights, giving them disproportionate control over knowledge and technology. This dominance can restrict the ability of developing countries to access and utilize intellectual assets, perpetuating a cycle of dependency and hindering local innovation and economic development (Maskus, 2000). In essence, the current IPR regime can reinforce the divide between knowledge-rich and knowledge-poor nations, further marginalizing vulnerable populations.

Additionally, the enforcement of stringent IPR protection measures can lead to monopolistic practices and market distortions, stifling competition and hindering economic growth. Patent thickets, patent trolls, and abusive litigation tactics can create barriers to entry for small and medium-sized enterprises (SMEs), limiting their ability to compete and innovate (Shapiro, 2001). This concentration of intellectual property in the hands of a few powerful entities undermines the principles of fair competition and market efficiency, hindering the emergence of inclusive and dynamic economies.

Furthermore, the privatization of knowledge through IPR can hinder collective problem-solving and collaboration on global challenges. In fields such as climate change, public health, and food security, open access to scientific research and data is essential for developing effective solutions and fostering innovation. However, restrictive patent and copyright regimes can impede collaboration and information sharing, slowing down progress in addressing pressing global issues that require collective action and interdisciplinary collaboration (Romer, 1990).

Despite these challenges, there are opportunities to reform the current IPR regime to better align with the principles of inclusive development and the free flow of knowledge. Initiatives such as open access publishing, technology transfer agreements, and patent pools can promote greater access to essential knowledge and technologies while still providing incentives for innovation. Furthermore, strengthening the capacity of developing countries to participate in the global knowledge economy through technology transfer, capacity building, and technical assistance can help bridge the digital divide and promote more equitable development outcomes (Arora, Fosfuri, & Gambardella, 2001).

In conclusion, while Intellectual Property Rights play a crucial role in incentivizing innovation and creativity, they also present significant challenges to achieving inclusive development and the free flow of knowledge across the globe. Addressing these challenges requires a concerted effort to reform the current IPR regime, promote greater access to essential knowledge and technologies, and strengthen the capacity of developing countries to participate in the global knowledge economy. By embracing a more inclusive and equitable approach to intellectual property, we can harness the power of knowledge and innovation to create a more prosperous, sustainable, and equitable world for all.

Monopoly on IPR and Issues of Health, Agriculture, and Education in Developing and Underdeveloped Countries

The monopoly of developed countries on Intellectual Property Rights (IPR) has significant implications for health, agriculture, and education in developing and underdeveloped countries across Asia, Africa, and Latin America. These regions face a myriad of challenges exacerbated by the restrictive nature of IPR, which often impedes access to essential knowledge, technologies, and resources.

In the realm of health, the monopoly of developed countries on pharmaceutical patents and copyrights has created barriers to accessing life-saving medications in developing countries. Patent protection allows pharmaceutical companies to maintain exclusive rights over their drugs, resulting in high prices that are often unaffordable for patients in low-income countries. This monopoly not only limits access to essential medicines but also hinders the development of generic alternatives, prolonging the dependence of developing countries on expensive imported drugs (WHO, 2006). Diseases such as HIV/AIDS, malaria, and tuberculosis disproportionately affect these regions, and the lack of affordable treatments perpetuates the cycle of poverty and ill health.

Similarly, in agriculture, the dominance of developed countries in agricultural biotechnology and seed patents has raised concerns about food security and agricultural sustainability in developing nations. Multinational corporations control the majority of patents on genetically modified seeds and agricultural technologies, limiting the ability of smallholder farmers to access and utilize these innovations. High licensing fees, restrictive intellectual property agreements, and legal barriers prevent farmers in developing countries from saving seeds, adapting crops to local conditions, and accessing diverse genetic resources (CIPR, 2002). This monopoly exacerbates food insecurity, undermines agricultural biodiversity, and perpetuates dependency on external inputs, jeopardizing the long-term resilience of food systems in these regions.

In the field of education, the monopoly of developed countries on copyright and digital content has hindered access to quality educational resources in developing nations. Textbook publishers and educational content providers often hold exclusive copyrights over learning materials, limiting the availability of affordable and culturally relevant resources for students and educators in low-resource settings. High licensing fees, digital rights management, and restrictive licensing agreements prevent the widespread dissemination and adaptation of educational content, exacerbating educational inequalities and hindering efforts to improve literacy, numeracy, and skills development (WIPO, 2007). This monopoly stifles innovation in pedagogy and curriculum development, constraining the ability of developing countries to address the diverse learning needs of their populations and promote inclusive and equitable education systems.

The monopoly of developed countries on Intellectual Property Rights presents significant challenges for health, agriculture, and education in developing and underdeveloped countries across Asia, Africa, and Latin America. Addressing these challenges requires a concerted effort to reform the current IPR regime, promote greater access to essential knowledge and technologies, and strengthen the capacity of developing countries to participate in the global knowledge economy. By embracing a more inclusive and equitable approach to intellectual property, we can harness the power of innovation and creativity to improve health outcomes, enhance food security, and promote access to quality education for all.

Usurpation of Traditional Knowledge and Knowhow of Developing and Underdeveloped Countries by Developed Countries Through IPR

The usurpation of traditional knowledge and know-how from developing and underdeveloped nations by developed countries through the acquisition of Intellectual Property Rights (IPR) is a pervasive and ethically contentious issue. This phenomenon occurs across various domains, including arts, music,

medicine, science and technology, as well as traditional crops and fruits, and it often perpetuates historical inequalities and economic exploitation. Concrete examples from deprived countries illustrate the extent of this problem and its impact on local communities and economies.

In the realm of traditional medicine, indigenous communities in countries such as India, Brazil, and Kenya possess rich knowledge of medicinal plants and healing practices passed down through generations. However, multinational pharmaceutical companies have exploited this traditional knowledge by patenting medicinal formulations derived from indigenous plants without proper consent or compensation (WHO, 2002). One notable example is the case of turmeric, a widely used spice and traditional remedy in India. Despite its long history of use in Ayurvedic medicine, a US-based company was granted a patent for the wound-healing properties of turmeric, sparking outrage and legal battles that eventually led to the patent being revoked (Shiva, 2007). Similarly, the patenting of neem-based pesticides by multinational corporations infringed upon the traditional knowledge of Indian farmers and herbalists, who had been using neem for pest control for centuries.

In the field of agriculture, the appropriation of traditional crops and fruits by developed countries through plant patents and seed patents has had detrimental effects on farmers in developing nations. Basmati rice, a fragrant long-grain rice variety native to the Indian subcontinent, faced patent challenges when a US-based company attempted to claim ownership over specific Basmati rice lines and grain characteristics. This move threatened the livelihoods of Indian farmers who had been cultivating and improving Basmati rice varieties for centuries (Gaudilliere, 2014). Similarly, the patenting of varieties of quinoa, a staple crop of Andean communities in South America, by multinational corporations raised concerns about the loss of biodiversity, cultural heritage, and economic sovereignty for indigenous farmers (Howard, 2009).

In the realm of arts and music, traditional cultural expressions from developing countries have been appropriated and commercialized by individuals and companies from developed nations, often without proper attribution or compensation. Traditional songs, dances, and artistic motifs from Africa, Latin America, and Asia have been commodified and repackaged for global consumption, leading to the marginalization of indigenous artists and cultural practitioners (WIPO, 2011). For example, the appropriation of indigenous designs and motifs by fashion brands and retailers without acknowledgment of their cultural significance or compensation to the communities that originated them perpetuates cultural exploitation and erasure.

In science and technology, the exploitation of traditional knowledge and practices by developed countries through patents and copyrights has raised ethical concerns about fairness and justice. Bioprospecting expeditions in the Amazon rainforest, for instance, have led to the discovery and patenting of medicinal plants and genetic resources used by indigenous peoples for centuries. Despite international agreements such as the Nagoya Protocol aimed at ensuring equitable benefit-sharing from the commercial use of genetic resources, indigenous communities continue to face challenges in asserting their rights and interests in the face of powerful multinational corporations and legal complexities (Timmermann & Hamilton, 2014).

Finally, it can be concluded that the unethical usurpation of traditional knowledge and know-how from developing and underdeveloped nations by developed countries through the acquisition of Intellectual Property Rights is a systemic issue that perpetuates inequalities and undermines cultural heritage, economic sovereignty, and human rights. Concrete examples from deprived countries underscore the urgency of addressing this issue through stronger legal protections, community empowerment, and international cooperation to ensure that traditional knowledge and cultural expressions are respected, valued, and preserved for the benefit of all.

How to Protect Usurpation of IP of Developing and Underdeveloped Nations by Developed Nations

Protecting the intellectual property of developing and underdeveloped nations from usurpation by developed countries through unethical acquisition of Intellectual Property Rights (IPR) requires a multifaceted approach that encompasses legal, regulatory, and policy measures, as well as international cooperation and community empowerment. By addressing the root causes of exploitation and strengthening the capacity of vulnerable communities to assert their rights, it is possible to promote equity, justice, and respect for cultural heritage and traditional knowledge.

One key strategy is to strengthen the legal frameworks and regulatory mechanisms governing intellectual property to ensure that they are inclusive, transparent, and equitable. Developing countries can enact laws and regulations that recognize and protect traditional knowledge, cultural expressions, and genetic resources, ensuring that indigenous communities have legal recourse to prevent the unauthorized appropriation of their intellectual assets. Additionally, international agreements such as the Nagoya Protocol provide a framework for equitable benefit-sharing from the commercial use of genetic resources, helping to prevent biopiracy and exploitation (WIPO, 2011).

Another approach is to promote community-based approaches to intellectual property management that empower local stakeholders to assert their rights and interests. Community protocols, traditional knowledge registries, and collective intellectual property rights mechanisms can enable indigenous peoples and local communities to document, protect, and manage their intellectual assets in ways that respect their cultural values, customary laws, and governance systems. By involving communities in decision-making processes and fostering partnerships with governments, civil society organizations, and the private sector, it is possible to promote participatory and inclusive approaches to intellectual property management (WHO, 2002).

Furthermore, capacity-building and technical assistance initiatives can help strengthen the ability of developing countries to navigate the complexities of the intellectual property system and assert their rights effectively. Training programs, workshops, and awareness-raising campaigns can provide communities, policymakers, and legal practitioners with the knowledge, skills, and resources needed to identify, protect, and enforce intellectual property rights. International organizations, donor agencies, and academic institutions can play a crucial role in supporting capacity-building efforts and facilitating knowledge sharing and collaboration across borders (WIPO, 2007).

Moreover, promoting fair and equitable access to intellectual property through technology transfer, licensing agreements, and collaborative research partnerships can help address imbalances in the global knowledge economy. Developing countries can negotiate technology transfer agreements that facilitate the transfer of know-how and expertise from developed countries in exchange for fair and reasonable compensation and benefit-sharing arrangements. Similarly, open access initiatives, open licensing models, and public-private partnerships can promote the free flow of knowledge and innovation while still providing incentives for creativity and invention (Maskus, 2000; Stiglitz, 2006).

Protecting the intellectual property of developing and underdeveloped nations from usurpation by developed countries through unethical acquisition of IPR requires a comprehensive and collaborative approach that addresses legal, regulatory, policy, and capacity-building dimensions. By strengthening legal frameworks, empowering communities, promoting technology transfer, and fostering international cooperation, it is possible to promote equity, justice, and respect for cultural diversity while harnessing the power of intellectual property to drive sustainable development and improve the lives of people around the world.

Conclusion

Intellectual Property Rights (IPR) have a complex and multifaceted impact on the global economy, society, and environment. While IPR serve as a catalyst for innovation, creativity, and economic growth, they also present challenges that can hinder progress towards a more inclusive, disease-free, peaceful, and livable world.

One of the primary concerns with IPR is its potential to create barriers to access essential goods and services, particularly in sectors such as healthcare, education, and agriculture. Patent monopolies on life-saving medications, for example, can result in prohibitively high prices that limit access for patients in developing countries, perpetuating health inequalities and hindering efforts to combat diseases such as HIV/AIDS, malaria, and tuberculosis. Similarly, copyright restrictions on educational materials and digital content can impede access to knowledge and learning resources, exacerbating educational disparities and hindering efforts to promote literacy, numeracy, and skills development.

Moreover, the concentration of intellectual property in the hands of a few powerful entities can lead to monopolistic practices and market distortions that stifle competition and innovation. Patent thickets, patent trolls, and abusive litigation tactics can create barriers to entry for small and medium-sized enterprises (SMEs), limiting their ability to compete and innovate in the global marketplace. This concentration of power can also exacerbate economic inequalities and hinder efforts to achieve inclusive economic growth and development.

In addition, IPR can impede technology transfer and collaboration on global challenges such as climate change, food security, and public health. Restrictive patent regimes can inhibit the dissemination of clean technologies and renewable energy solutions, slowing progress towards a sustainable and low-carbon future. Similarly, patent barriers can hinder the sharing of genetic resources and scientific knowledge needed to address global health threats and promote biodiversity conservation. This lack of cooperation and information sharing undermines collective efforts to tackle pressing global challenges and achieve common goals for the betterment of humanity.

Furthermore, IPR can exacerbate geopolitical tensions and exacerbate conflicts over resources and markets. Disputes over intellectual property infringement, trade secrets, and patent violations can escalate into trade wars and diplomatic tensions between countries, undermining trust and cooperation in the international community. Moreover, the unequal distribution of intellectual property rights between developed and developing countries can perpetuate economic dependency and exacerbate North-South inequalities, fueling resentment and social unrest.

Despite these challenges, there are opportunities to reform the current IPR regime to better align with the principles of inclusivity, sustainability, and global cooperation. Initiatives such as open access publishing, technology transfer agreements, and patent pools can promote greater access to essential knowledge and technologies while still providing incentives for innovation. Similarly, capacity-building efforts and technical assistance programs can help strengthen the ability of developing countries to navigate the complexities of the intellectual property system and assert their rights effectively.

Finally, it can be argued that while Intellectual Property Rights play a crucial role in fostering innovation and economic development, they also present challenges that can hinder progress towards a more inclusive, disease-free, peaceful, and livable world. By addressing these challenges through reforms that promote equitable access to knowledge and technology, foster collaboration and cooperation, and empower vulnerable communities, it is possible to harness the power of intellectual property for the collective benefit of humanity and create a more just, sustainable, and prosperous world for all.

References

- Aaker, D. A. (1991). *Managing Brand Equity: Capitalizing on the Value of a Brand Name*. Free Press.
- Arora, A., Fosfuri, A., & Gambardella, A. (2001). *Markets for Technology: The Economics of Innovation and Corporate Strategy*. MIT Press.
- CIPR (2002). *Integrating Intellectual Property Rights and Development Policy*. Commission on Intellectual Property Rights.
- Economides, N. (1988). The Economics of Trademarks. *Trademark Reporter*, 78, 523-539.
- Gaudilliere, J.-P. (2014). The Basmati Rice Controversy and the Issue of Protection of Traditional Knowledge. In *The Global Governance of Knowledge Creation and Diffusion*.
- Hall, B. H., & Harhoff, D. (2012). Recent Research on the Economics of Patents. *Annual Review of Economics*, 4(1), 541-565.
- Howard, P. H. (2009). *Visualizing Consolidation in the Global Seed Industry: 1996–2008*. Sustainability.
- Jaffe, A. B., & Lerner, J. (2004). *Innovation and Its Discontents: How Our Broken Patent System is Endangering Innovation and Progress, and What to Do About It*. Princeton University Press.
- Landes, W. M., & Posner, R. A. (2003). *The Economic Structure of Intellectual Property Law*. Harvard University Press.
- Lessig, L. (2004). *Free Culture: How Big Media Uses Technology and the Law to Lock Down Culture and Control Creativity*. Penguin Press.
- Maskus, K. E. (2000). *Intellectual Property Rights in the Global Economy*. Institute for International Economics.
- Park, W. G., & Lippoldt, D. (2008). *The Impact of Trade-Related Intellectual Property Rights on Trade and Foreign Direct Investment in Developing Countries*. OECD Trade Policy Papers, No. 62, OECD Publishing.
- Posey, D. A., & Dutfield, G. (1996). *Beyond Intellectual Property: Toward Traditional Resource Rights for Indigenous Peoples and Local Communities*. International Development Research Centre.
- Romer, P. M. (1990). Endogenous Technological Change. *Journal of Political Economy*, 98(5), S71-S102.
- Stiglitz, J. E. (2006). *Making Globalization Work*. W.W. Norton & Company.
- Shapiro, C. (2001). Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard-Setting. *Innovation Policy and the Economy*, 1, 119-150.
- Romer, P. M. (1990). Endogenous Technological Change. *Journal of Political Economy*.
- Shapiro, C. (2001). Navigating the Patent Thicket: Cross Licenses, Patent Pools, and Standard-Setting. *Innovation Policy and the Economy*.
- Shiva, V. (2007). *Biopiracy: The Plunder of Nature and Knowledge*. South End Press.



- Stiglitz, J. E. (2006). *Making Globalization Work*. W.W. Norton & Company.
- Timmermann, C., & Hamilton, C. (2014). *Sharing Benefits from the Utilization of Plant Genetic Resources for Food and Agriculture*. Routledge.
- WHO (2002). *Traditional Medicine: Growing Needs and Potential*. World Health Organization.
- WHO (2006). *Public Health, Innovation, and Intellectual Property Rights*. World Health Organization.
- WIPO (2007). *The Economics of Intellectual Property: Suggestions for Further Research in Developing Countries and Countries with Economies in Transition*. World Intellectual Property Organization.
- WIPO (2011). *Protecting Traditional Cultural Expressions: Policy Issues and Considerations for Policy-Makers*. World Intellectual Property Organization.
- WIPO. (n.d.). *What is Intellectual Property?* Retrieved from <https://www.wipo.int/about-ip/en/>.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).