# **Comparative Analysis of Intellectual Property Laws of Bangladesh and India in the Age of Global Techno-Capitalism**

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Article

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**Abstract:** In an era where intangible assets increasingly dictate global economic and technological hierarchies, intellectual property (IP)has emerged as a critical battleground between innovation, control, and access. This article undertakes a comparative legal and socio-political analysis of IP frameworks in Bangladesh and India, contextualized within the broader transformation brought by global techno-capitalism. While both countries share postcolonial legacies and common development goals, they diverge significantly in legal architecture, enforcement strategies, and policy orientation especially in handling emerging challenges such as artificial intelligence (AI), digital content ownership, and platform-based economies. The study interrogates how global technology giants operating under the shields of TRIPS and WIPO-centric regimes reproduce neo-imperial monopolies over knowledge, data, and algorithmic outputs. The article introduces a regional perspective by exploring South Asia's capacity for IP reform through sui generis legal systems, grassroots innovation protection, participatory policymaking, and regional collaboration. It argues for a human-centered, context-sensitive IP regime that values not only innovation and economic development but also equity, inclusiveness, access to knowledge, and cultural continuity. Ultimately, this work contributes to reimagining IP law as a vehicle for epistemic justice, rather than as a tool for perpetuating techno-capitalist hierarchies and exploitative asymmetries.

**Keywords:** intellectual property; Bangladesh; India; techno-capitalism; TRIPS; indigenous knowledge; AI governance; epistemic justice; digital sovereignty; decolonial legal thought

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# 1. Introduction

Intellectual property (IP) has become a key pillar of the global digital economy, underpinning innovation, technological advancement, and transnational commerce. In the digital age where knowledge is the primary currency, intellectual property rights (IPRs) protect creative expressions and inventions and the balance of power among information, algorithms, and digital infrastructure (Gervais 2020). From patents protecting life-saving medicines to the copyrights that shape digital platforms such as YouTube or Spotify, IP frameworks determine the nature of innovation's reward and who profits from it.<sup>1</sup> This transformation is particularly pronounced in the post-industrial, platform-driven economy, where intangible assets like data, software, and cultural heritage are monetized globally. The legal architecture surrounding IP is analogues to physical goods and static ownership models posing a challenge between territorial legal regimes and the borderless nature of digital technologies (Correa2019). For emerging economies, especially in South Asia, this poses a dual challenge: adapting to global IP standards while addressing socio-economic and technological disparities within their jurisdictions.<sup>2</sup>

Techno-capitalism, a term associated with surveillance economies and algorithmic monopolies is reshaping the contours of intellectual property (Zuboff 2019). In this model, data is collected, commodified and privatized, often behind layers of proprietary software and platform-based IP claims. Intellectual property serves as a legal instrument for digital dominance besides incentivizing invention. Big Tech firms routinely weaponize patents and copyright claims to suppress competition and control the digital ecosystems (Biddle 2022). These developments are legal as well as commercial and ideological in nature but, manifesting asymmetrical access to knowledge resources and the appropriation of communal knowledge for corporate gain (Sell 2003). In South Asia, this translates into

<sup>2</sup> Copyright Act, 2023 (Bangladesh); Patents Act, 1970 (India); Geographical Indication (GI) Act, 2013 (Bangladesh)

<sup>&</sup>lt;sup>1</sup> TRIPS Agreement, Annex 1C to the Marrakesh Agreement Establishing the World Trade Organization, 1994.

the digital enclosure of indigenous knowledge, folklore, and agricultural innovation where legal protection is weak, and global value chains are skewed against local producers (Gervais 2020).

COVID-19 pandemic amplified the global IP divide. Existing IP rules can block equitable vaccine distribution, a crisis of health and IP justice (WTO 2021). The same IP logic that undergirds pharmaceutical patents also governs artificial intelligence models, digital surveillance technologies, and blockchain applications, each with profound implications for socio-political autonomy in the Global South.

Both Bangladesh and India inherited British colonial IP structures, rooted in industrial capitalism and Eurocentric legal theory. While India has made deliberate strides, such as developing the Traditional Knowledge Digital Library (TKDL) and implementing compulsory licensing policies, Bangladesh's engagement with IP has been more regulatory than reformative (Correa 2019). Despite different trajectories, both countries face a common dilemma of aligning national innovation systems with global IP standards while safeguarding local traditional knowledge and promoting technological equity.<sup>3</sup> India's role in the global generic pharmaceutical industry and Bangladesh's rise in creative sectors like fashion and digital outsourcing highlight South Asian economies reliance to flexible IP regimes (Dhar and Joseph 2012). However, both countries remain vulnerable to "IP capture", the risk that transnational corporations may appropriate local resources and technologies through legal means backed by trade and investment agreements. Thus, Bangladesh and India are not merely passive recipients of global IP trends. Their legal experiments and resistance strategies can inform a broader rethinking of how the Global South can assert knowledge sovereignty in the age of techno-capitalism.

This article critically analyzes the structural limitations of current IP frameworks in South Asia, focusing on how techno-capitalism and global trade regimes affect legal equity and innovation justice in Bangladesh and India. The study combines a comparative legal analysis with an interdisciplinary approach that draws on political economy, information ethics, and decolonial theory. Methodologically, this paper examines statutory laws, court rulings, policy documents, and international agreements, bypassing the epistemological biases embedded in these sources. By foregrounding epistemic justice and drawing on legal struggles, it suggests a more inclusive, pluralistic IP future that transcends techno-capitalist imperatives.

# 2. Intellectual Property Laws in Bangladesh

Bangladesh's intellectual property (IP) regime has undergone significant legislative transformation, complied the international norms while preserving local knowledge and creativity. The Copyright Act 2023<sup>4</sup> and Patent Act 2023<sup>5</sup> reflect efforts to modernize outdated laws that were remnants of colonial and early post-independence legal architecture. The Copyright Act 2023 introduces broader definitions of "works" to encompass digital content, cinematographic films, and web-based creations, aligning partially with the WIPO internet treaties. It attempts to streamline licensing, improve collective management organization (CMO) operations, and offers modest digital rights management provisions. However, its application remains traditional, particularly for authorship which is still limited to human creators. The Patent Act 2023 improves procedural clarity and introduces a 20-year term of protection compliant with TRIPS standards. It attempts to shorten application timelines and introduces opposition mechanisms to challenge frivolous or monopolistic claims. Nonetheless, critiques remain regarding its weak framework for pharmaceutical patents and the lack of integration with regional innovation systems (Hasan and Alam 2023).

The Geographical Indications (Registration and Protection) Act 2013<sup>6</sup>, though a decade old, only began yielding results in the past few years. With the GI registration of Jamdani sarees in 2016, Bangladesh laid the foundation for protecting products of traditional craftsmanship. Still, GI protection remains narrow in scope, with limited awareness among producers and negligible enforcement of misuse in international markets (Rahman and Sarker 2022).

The Trademarks Act 2009, while over a decade old, continues to serve as a critical pillar in Bangladesh's intellectual property framework, particularly in the age of brand globalization and digital consumerism. The Act provides the legal infrastructure for registering and protecting brand identities, logos, symbols, words, or combinations—that distinguish goods and services in the market. This has profound relevance in a digital economy increasingly driven by brand recognition and online commerce. Although the Act largely aligns with the TRIPS Agreement, its operational effectiveness is now being tested by the rapid proliferation of ecommerce platforms and transnational business models, where counterfeit goods can bypass physical borders (Ahmed and Noor 2024). A key emerging challenge is the inadequate enforcement mechanism against digital infringements, as the current legal text remains grounded in a pre-digital mindset. Moreover, the backlog in trademark examinations and the lack of digitization within the Department of Patents, Designs and Trademarks (DPDT) significantly delay market entry for local entrepreneurs seeking brand protection, essentially stifling innovation at the grassroots level. The need for a harmonized regional enforcement model, especially within the South Asian trade bloc, has never been more urgent, given the increasing instances of brand piracy and domain squatting targeting Bangladeshi trademarks abroad. Thus, while the Trademarks Act offers a robust theoretical framework, its contemporary relevance hinges on urgent procedural reforms, technological modernization, and stronger public-private collaborations to truly empower Bangladeshi creators in the global market (Khan and Rahim 2025).

Despite formal improvements, the enforcement of IP rights (IPRs) in Bangladesh is facing structural and operational challenges. The digital content production has outpaced the state's regulatory response. Enforcement agencies lack training in identifying and prosecuting digital piracy cases, across platforms like YouTube, Facebook, and Telegram. The backlog at the Department of Patents, Designs and Trademarks (DPDT) significantly hampers the registration process. Lack of digitization means paper-heavy

<sup>&</sup>lt;sup>3</sup> Novartis AG v. Union of India & Others, (2013) 6 SCC 1 (Supreme Court of India).

<sup>&</sup>lt;sup>4</sup> Copyright Act 2023. Available Online: <u>http://bdlaws.minlaw.gov.bd/act-1452.html</u> (accessed on 23 March 2025)

<sup>&</sup>lt;sup>5</sup> Patent Act 2023. Available Online: <u>http://bdlaws.minlaw.gov.bd/upload/act/2023-12-26-10-14-41-Act-No.-53-of-2023.pdf</u> (accessed on 23 March 2025)

<sup>&</sup>lt;sup>6</sup> Geographical Indications (Registration and Protection) Act 2013. Available Online: <u>http://banglaip.com/downloads/GI%20Act-2013%20English.pdf</u>

workflows delaying applications, and disincentivizing innovators. CMOs, meanwhile, are plagued by governance issues, leading to distrust among artists and content creators.

Digital piracy is growing due to weak enforcement of anti-circumvention provisions and a lack of cooperation from internet service providers (ISPs). The absence of effective site-blocking legislation allows pirated material to be shared across domains with impunity. Regulatory ambiguity about digital broadcasting and over-the-top (OTT) services has created grey zones where copyright infringement thrives (Hasan and Alam 2023). The Jamdani saree, a traditional handloom textile, exemplifies the contested terrain of cultural IP. While Bangladesh secured GI status for Jamdani in 2016<sup>7</sup>, enforcement beyond national borders remains difficult. Indian weavers continue to label similar fabrics as Jamdani, diluting brand identity and market value. Despite the GI tag, local weavers have seen little economic benefit, mainly due to bureaucratic hurdles in registration, export barriers, and a lack of marketing support (Rahman and Sarker 2022).

Bangladeshi music industry is facing copyright conflicts on YouTube. Several Bangladeshi artists have reported unauthorized use of their music by YouTube channels and overseas distributors. Without a robust notice and takedown mechanism or international cooperation with digital platforms, creators struggle to reclaim their rights or monetize content effectively.

Bangladesh has yet to initiate formal discourse for algorithmic creations. There is no statutory recognition of AI-generated works, and the Copyright Act 2023 maintains a strictly anthropocentric definition of authorship. In a world where generative AI tools like ChatGPT or Midjourney can produce artistic, literary, and technical outputs, this absence renders Bangladesh unprepared for upcoming techno-legal dilemmas (Hasan and Alam 2023). There is no guidance on data ownership, machine learning model training using copyrighted content, or liability for algorithmic plagiarism. This lacuna creates a vacuum where global tech corporations can exploit data resources without oversight, potentially deepening the country's digital dependency. Without strategic reforms, Bangladesh risks becoming a passive consumer in the emerging global IP order dominated by AI, platform capital, and data monopolies. Recognizing the intellectual and economic stakes of digital sovereignty must be the starting point for policy innovation in the coming decade.

# 3. India's IP System in the Digital Economy

India's intellectual property (IP) regime stands among the most evolved in the Global South, with a nuanced legal infrastructure that navigates between global obligations and domestic developmental imperatives. The foundation lies in the Patents Act, 1970, which was significantly amended in 2005 to align with the TRIPS. India has consistently exercised TRIPS flexibilities to protect public health, innovation equity, and indigenous knowledge (Raju 2022).

The Traditional Knowledge Digital Library (TKDL) is a unique intervention. Launched in 2001 and maintained by the Council of Scientific and Industrial Research (CSIR), TKDL documents over 200,000 formulations from Ayurveda, Siddha, and Unani traditions. It is not merely archival; it is a defensive tool to block biopiracy and illegitimate patents in jurisdictions like the United States and Europe (Banerjee and Prasad 2020). This sui generis mechanism has built a proactive Indian stance in international forums, illustrating how postcolonial legal imagination can disrupt Western epistemological monopolies.

India's Copyright Act, 1957, amended several times (most recently in 2012), includes provisions responsive to digital realities. It integrates technological protection measures (TPMs), regulates digital rights management, and extends authorship recognition to cinematographic and sound recording creators. Still, the law remains tethered to anthropocentric authorship, excluding algorithmically generated content from formal copyright ability (Basheer 2015). As AI-generated content becomes mainstream, this exclusion reveals a normative gap in Indian IP law.

The Novartis AG v. Union of India case<sup>8</sup> (2013) became a global flashpoint in the battle between patent rights and access to medicines. The Supreme Court of India upheld the rejection of Novartis's patent for a beta crystalline form of imatinib mesylate, emphasizing that incremental innovation lacking enhanced efficacy does not meet the Section 3(d) threshold under the Patents Act. This verdict asserted India's sovereign right to define patentability standards based on public interest and established jurisprudential resistance to "evergreening" by pharmaceutical giants.

In contrast, the Delhi University Photocopy Case brought attention to educational access in a digital economy. The Delhi High Court ruled that reproduction of academic materials for educational use falls under fair dealing and is not infringing, reinforcing education as a public good. These cases signal India's dual commitment to access and innovation, with courts playing a pivotal role in balancing public and proprietary interests.<sup>9</sup>

India's digital economy is being shaped by IP tensions between local startups and global platforms (MeitY 2022). Indian firms such as Zomato, Flipkart, and Paytm operate within asymmetrical ecosystems dominated by transnational players like Amazon and Google, whose vast patent portfolios and platform dominance create barriers to Flipkart has faced legal disputes over user interface design and algorithmic recommendation engines, which are often patented by global firms under U.S. or EU IP laws (Sengupta 2021). Indian tech startups suffer from limited patent filings due to high costs and procedural complexity. India's ranking in the Global Innovation Index has improved, yet most startups remain consumers, not owners, of high-value digital IP.

The Government of India's Startup India initiative and the IPR Awareness Program are rectifying this imbalance through IP facilitation centres and fee subsidies. However, structural issues persist especially the lack of coordinated IP education, weak enforcement, and limited cross-border IP protection mechanisms for Indian firms. Recognizing the disruptive power of artificial intelligence and data-driven technologies, India has initiated a policy discourse through whitepapers by the NITI Aayog and the Ministry

<sup>&</sup>lt;sup>7</sup> GI registration of "Jamdani" by DPDT in 2016. Available Online: https://www.thedailystar.net/frontpage/jamdani-finally-gets-recognition-1316581

<sup>&</sup>lt;sup>8</sup> Novartis AG v. Union of India, (2013) 6 SCC 1 (Supreme Court of India)

<sup>&</sup>lt;sup>9</sup> The Chancellor, Masters & Scholars of the University of Oxford v. Rameshwari Photocopy Services, CS(OS) 2439/2012 (Delhi High Court)

of Electronics and Information Technology (MeitY). The 2021 National Strategy for Artificial Intelligence emphasizes ethical use, data privacy, and inclusive innovation but remains silent on IP rights for AI-generated content.

The MeitY Discussion Paper on the Digital India Act (2022) hints at future regulation of platform liability and algorithmic transparency. India needs to update its copyright or patent laws to accommodate generative technologies like ChatGPT, Midjourney, or Bard. There is no formal recognition of AI-generated authorship or clarity on rights over datasets used in training machine learning models (Samuelson 2023). This regulatory vacuum raises concerns about digital sovereignty. Without IP frameworks to govern generative AI and big data ownership, Indian data may become the raw material for value extraction by global corporations.

## 4. Techno-Capitalism and the Global Intellectual Property Order

The current global intellectual property (IP) regime cannot be fully understood without interrogating the evolving dynamics of techno-capitalism, a form of capitalism deeply entangled with digital infrastructures, platform monopolies, algorithmic governance, and data extraction. Techno-capitalism has reshaped not only how value is created and extracted but also how legal structures, particularly those governing IP, are constructed, enforced, and contested (Zuboff, 2019). In this context, IP law emerges less as a neutral arbiter of innovation and more as an instrument of accumulation for transnational capital.

This structural shift is crucial for South Asian jurisdictions such as India and Bangladesh, which are increasingly integrated into the circuits of global data capitalism. The transmutation of IP into a geopolitical and economic tool, evident from the aggressive enforcement of patents by pharmaceutical giants or software firms in the Global North exemplifies how techno-capitalism instrumentalizes legal regimes to secure asymmetrical power relations (May and Sell 2006). Here, innovation is commodified, enclosure of knowledge is normalized, and the Global South is coerced into compliance through mechanisms like the TRIPS Agreement.

The World Trade Organization's TRIPS is a cornerstone of global IP governance. Although framed as a harmonization tool, TRIPS has entrenched neo-colonial hierarchies by enforcing uniform IP standards without adequately considering the socio-economic specificities of countries including India and Bangladesh. Okediji (2003) argues that TRIPS reflects the interests of powerful states and multinational corporations, subordinating the developmental needs of postcolonial states.

India, had to significantly overhaul its patent regime to align with TRIPS, moving from a process-patent system to a productpatent system in 2005. This transition weakened the country's capacity to produce generic pharmaceuticals, a domain it once dominated, and led to the monopolization of drug markets by foreign firms (Chaudhuri 2005). Bangladesh, as a least developed country (LDC), has temporary exemptions under TRIPS until 2034, particularly in pharmaceuticals (WTO 2021). However, this exemption permits policy flexibility, and postpones structural reform, delaying long-term sovereignty in innovation governance.

The evolution of platform capitalism, dominated by actors like Meta, Alphabet, and Amazon, adds a new layer to the IP landscape. These platforms rely not on traditional copyright or patent mechanisms alone but on sophisticated forms of proprietary control over algorithms, datasets, and user interactions (Srnicek 2017). In this architecture, IP law is weaponized to construct barriers around digital assets, shielding proprietary algorithms and restricting open access.

For India and Bangladesh, the problem is twofold. First, domestic regulatory infrastructures are underdeveloped, rendering them vulnerable to extractive data practices by foreign platforms. Second, domestic innovation ecosystems lack the capital and institutional support to challenge these monopolies. India's efforts to develop its own data protection regime through the Digital Personal Data Protection Act, 2023, are a step forward. However, it has been critiqued for lacking adequate checks on state surveillance and offering ambiguous protection against foreign data extraction (Basu 2023).

Bangladesh lags even further. With no comprehensive data protection legislation in place, its digital economy remains largely ungoverned, amplifying concerns over techno-colonial dependencies. In both cases, the structural asymmetries of techno-capitalism, where data flows northward while IP protections flow southward, are clearly visible.

Resistance to the global IP order has taken shape in and outside formal legal systems. India as a country has been more aggressive in pushing the flexibilities under TRIPS to address its public health concerns, including invoking compulsory licensing under Section 84 of the Indian Patents Act, 1970,<sup>10</sup>as seen in the Natco Pharma matter in 2012 regarding Bayer's cancer drug Nexavar.<sup>11</sup> This demonstrates a strategic utilization of legal tools to prioritize public health over corporate IP claims.

Conversely, Bangladesh's compliance posture driven by aid conditionalities, trade dependencies, and institutional capacity limitations, has limited its ability to creatively engage with global IP frameworks. However, there is growing civil society advocacy calling for localized IP models that emphasize open access, indigenous knowledge, and equitable technology transfer (Kabir and Hossain 2020). Whether such grassroots resistance can translate into policy reform remains uncertain, but it indicates a fracture in the legitimacy of the global IP order.

Ultimately, the challenge for India and Bangladesh lies in reconceptualizing IP sovereignty not merely as compliance with international law but as the capacity to design systems that reflect local technological, economic, and cultural realities. This requires moving beyond the TRIPS paradigm and resisting the jurisdification of innovation in ways that entrench inequality.

The pathway forward might involve strengthening South-South cooperation, enhancing regional innovation ecosystems, and leveraging alternative IP models such as open-source licensing and communal knowledge regimes. But without structural reforms in global governance, especially the democratization of institutions like the World Intellectual Property Organization and the World Trade Organization, such efforts may remain piecemeal. The contemporary global IP order, shaped by techno-capitalism, thus presents both a constraint and an opportunity. For South Asia, the imperative is to not merely adapt but to fundamentally reimaging IP governance considering digital transformations and postcolonial aspirations.

<sup>&</sup>lt;sup>10</sup> The Patents Act, 1970. Available Online: <u>https://ipindia.gov.in/writereaddata/portal/ipoact/1\_31\_1\_patent-act-1970-11march2015.pdf</u>

<sup>&</sup>lt;sup>11</sup> Natco Pharma Ltd. v. Bayer Corporation, Compulsory License Application No. 1 of 2011

## 5. South Asia's struggles with Artificial Intelligence and Platform-Based Intellectual Property Conflicts

As artificial intelligence (AI) and digital platforms have become central actors in global economic production, South Asia faces a dual crisis of governance and infrastructural disparity. The transformation of IP production from human-centered authorship to algorithmic and platform-mediated generation is not a neutral or merely technological phenomenon; it signifies a tectonic shift in epistemic control and capital extraction from the Global South (Couldry and Mejias 2019). Automated content creation through generative AI tools like ChatGPT, DALL-E, and Sora has profound complications for IP regimes that were designed for manual, human authorship and national boundaries. These systems, mostly developed by tech conglomerates in the Global North, are deployed across South Asia without meaningful local consent, regulatory capacity, or cultural adaptation raising critical postcolonial concerns.

India, despite its status as a global IT hub, needs to formulate a comprehensive legal framework governing AI-generated works under its Copyright Act, 1957. Section 2(d) of the Act defines "author" in terms that do not clearly include non-human agents, leaving AI-generated works in legal limbo. While the Indian courts have historically relied on the originality standard based on skill, labor, and judgment (as seen in *Eastern Book Company v. D.B. Modak*, 2008),<sup>12</sup> it remains unclear whether algorithmic labor can fulfill such criteria. Bangladesh's legal apparatus, similarly, shaped by colonial-era legislation, faces even greater uncertainty. Bangladeshi Copyright Act, 2000 lacks the interpretive jurisprudence or institutional infrastructure necessary to meaningfully address machine authorship or platform-based reproduction of local cultural content.<sup>13</sup>

A particularly disturbing dimension of AI and platform-based IP regimes is the digital extraction and commodification of South Asian indigenous, folkloric, and vernacular knowledge. These cultural expressions, often unprotected under formal IP regimes due to their collective or anonymous origin, are now being mined by machine learning systems trained on massive datasets without attribution or compensation (Chander and Sunder 2004). Platforms like YouTube, TikTok, and Spotify algorithmically prioritize content based on engagement metrics, not cultural authenticity or historical context, distorting local creativity and its monetization by non-local actors.

India has made some efforts to safeguard traditional knowledge through databases like the Traditional Knowledge Digital Library (TKDL), but this initiative is reactive rather than preventive. It offers protection only when foreign patent office's attempt to appropriate Indian medicinal knowledge, as in the famous turmeric and neem patent cases.<sup>14</sup> However, such mechanisms fail to account for the ongoing digital appropriation of intangible cultural expressions in the AI age. Bangladesh lacks such partial protections, leaving its indigenous communities exposed to algorithmic exploitation.

The problem in the legal fictions surrounding platforms as neutral intermediaries and the exemption of digital platforms from direct liability for IP infringement under laws like Section 79 of the Indian Information Technology Act, 2000. Yet, these platforms act as economic gatekeepers and algorithmic curators, exerting disproportionate control over visibility, monetization, and ownership (Srnicek 2017). In India, the Delhi High Court has struggled with the scope of intermediary liability, especially in *MySpace Inc. v. Super Cassettes Industries Ltd.* (2016), where it recognized the responsibility of platforms to proactively remove infringing content once notified.<sup>15</sup> However, this reactive model is inadequate in the context of real-time AI-generated content.

Bangladesh's Information and Communication Technology Act, 2006, provides weaker safeguards. It contains broad censorship powers but lacks any coherent doctrine on intermediary liability or algorithmic accountability. As global digital platforms enter these legal vacuums, they shape not only economic opportunity but also legal norms, often bypassing domestic IP laws. This transgression of regulatory sovereignty aligns with what Achille Mbembe (2019) terms "necropolitical data regimes," wherein certain regions become zones of extraction rather than self-determined innovation.

Without substantive structural reforms, both India and Bangladesh risk becoming mere data mines and consumer markets in the emerging global hierarchy of algorithmic authorship, platform capitalism, and postcolonial IP regimes. Techno-legal infrastructures in these countries is inadequate to challenge the epistemic asymmetries entrenched by the Global North's dominance over AI tools, data governance, and platform economies.

An emancipatory pathway would involve asserting data sovereignty, embedding AI governance within human rights frameworks, and redefining authorship to reflect non-Western epistemologies of knowledge creation. The time has come for a postcolonial jurisprudence of IP—capable of confronting the digital enclosures that threaten to render South Asia's creative futures subordinate to algorithmic and platform-driven capital.

#### 6. Indigenous Knowledge and Legal Imagination

For generations, communities across the Indian subcontinent have cultivated rich bodies of traditional knowledge, medicinal, artisanal, and agricultural. The biopiracy episodes involving turmeric and neem are troubling examples of how global patent regimes have historically misappropriated indigenous knowledge, transforming community-held wisdom into private, foreign-owned monopolies.<sup>16</sup> The 1995 U.S. patent on turmeric wound healing properties,<sup>17</sup> later revoked, starkly illustrated the legal system's initial disregard for pre-existing, orally transmitted knowledge. In Bangladesh, the recognition of Jamdani weaving and Hilsa fish under the Geographical Indications Act 2013 has opened new avenues for cultural heritage protection. Yet, behind these legal victories

<sup>&</sup>lt;sup>12</sup> Eastern Book Company v. D.B. Modak, (2008) 1 SCC 1 (India)

<sup>&</sup>lt;sup>13</sup> Copyright Act, 2000 (Bangladesh), Act No. XXVIII of 2000

<sup>&</sup>lt;sup>14</sup> Turmeric Case: USPTO Patent No. 5,401,504; Neem Case: European Patent No. 0436257

<sup>&</sup>lt;sup>15</sup> MySpace Inc. v. Super Cassettes Industries Ltd., 2016 SCC OnLine Del 6382

<sup>&</sup>lt;sup>16</sup> The Geographical Indications of Goods (Registration and Protection) Act, 1999. https://www.indiacode.nic.in/handle/123456789/1981?locale=en

<sup>&</sup>lt;sup>17</sup> U.S. Patent No. 5,401,504 (1995), later revoked after legal opposition led by the Indian Council of Scientific and Industrial Research

lies a critical question: who truly benefits? Without localized ownership mechanisms or benefit-sharing frameworks, the value generated often bypasses the very communities that embody and preserve this knowledge (Hasan and Alam 2023).

The IP system we navigate today is not neutral. Its origin lies in colonial projects that systematically privileged certain forms of knowing while actively marginalizing others. European legal systems dismissed orally transmitted, communal knowledge as "non-innovative," thereby disqualifying entire civilizations from legal protection (Santos 2014). This process, aptly described as "epistemicide," silenced epistemologies across colonized lands. In India and Bangladesh alike, indigenous knowledge was reduced to folklore, useful only when extractable and commodifiable by colonial administrators. The legacy of these knowledge hierarchies still lingers in South Asia's current IP laws, which often rely on Eurocentric definitions of authorship, novelty, and originality.

The TKDL has successfully thwarted patent claims on over 200 instances of misappropriated knowledge, setting a global precedent (Reddy 2020). However, its approach is not without critique. The database is centrally managed, with little involvement from the communities whose knowledge it curates. Bangladesh, by contrast, lacks a similar defensive tool. Although the Geographical Indications Act 2013 represents progress, the country still does not possess a systematic platform for digitally safeguarding indigenous knowledge or empowering the custodians of that knowledge (Rahman and Sarker 2022).

A "just IP" framework would challenge the dominant logic of exclusivity and commodification, instead centering community agency, plurality of knowledge systems, and equitable benefit-sharing. This calls for reimagining law itself as a participatory, ethical practice grounded in cultural humility. Instead of forcing indigenous knowledge into Western legal molds, postcolonial states must create space for dialogic, localized models of ownership, wherein the rights of knowledge-holding communities are protected not just legally, but morally and politically (Sunder 2006).

## 7. Regional and Policy Roadmap for Intellectual Property Reform

The South Asian Association for Regional Cooperation (SAARC) has historically struggled to form cohesive frameworks across economic and legal sectors, and intellectual property (IP) law is no exception. However, the urgency of digitizing traditional knowledge (TK) and managing transnational IP disputes makes regional cooperation unavoidable. A joint initiative to establish a South Asian digital archive for TK, akin to India's Traditional Knowledge Digital Library (TKDL), could serve to combat biopiracy and patent misappropriation across global jurisdictions. Yet, the lack of mutual political trust, disparities in legal infrastructure, and diverging technological capacities present formidable obstacles (UNCTAD 2021). Any future collaboration must be designed to accommodate pluralistic legal cultures and prioritize multilingual access, community consent, and equitable representation.

A major bottleneck in South Asia's IP reform is the systemic lack of awareness among its key stakeholders. Legal practitioners, innovators, and entrepreneurs often remain uninformed about basic IP registration procedures. Addressing this requires a curricular reform within legal education and public outreach through localized, multilingual training. Law schools should embed modules on platform-based governance, algorithmic authorship, and community rights. Similarly, innovation hubs and start-ups must institutionalize IP training to navigate global licensing ecosystems (WIPO 2023).

The Eurocentric foundations of modern IP regimes are ill-equipped to address the nuances of non-human creativity, indigenous knowledge systems, and shared biological resources. A new generation of *sui generis* systems must emerge, designed specifically for the knowledge structures of the Global South. In the case of AI, this would entail acknowledging algorithmic agency without undermining ethical accountability. For TK, it requires legal models that transcend the binary of public domain versus private ownership, and for biodata, frameworks that enforce collective sovereignty and genomic privacy. Hybrid models blending IP, environmental law, and data governance could form the scaffolding of such a reimagined legal structure (UNCTAD 2021).

Decolonizing IP law entails more than critiquing its origins—it demands reconstructing its purpose. In the context of South Asia, legal reform must center justice over marketability and collective knowledge over proprietary extraction. This involves not only revising statutory texts but reimagining the very ontology of ownership to include community custodianship and intergenerational equity. Legal pluralism, where customary, religious, and community norms co-exist with formal statutory systems offers one potential pathway. Ultimately, to challenge techno-capitalist hegemony, South Asia must assert its epistemic sovereignty, redefining innovation as a social rather than commercial pursuit (Shiva 2001).

#### 8. Conclusions

Intellectual property (IP) in South Asia should be re-envisioned as a collective right that upholds human dignity, creativity, and equitable access. In both Bangladesh and India, IP regimes have been historically shaped by colonial and neoliberal pressures, which commodified knowledge systems, dispossessed indigenous communities, and undermined local innovation cultures. Reforms should begin with recognizing IP not solely as a tool of market control but as an extension of cultural autonomy and individual expression. The intersection of IP with fundamental rights, particularly the right to education, health, and participation in cultural life, demands a normative shift. A human rights-based approach compels legal reform that balances incentives for innovation with broad public access, especially in sectors like medicine, agriculture, and . This reframing supports not just economic development but inclusive, democratic innovative ecosystems. A striking feature of the techno-capitalist IP paradigm in both India and Bangladesh is the widening gap between producers of knowledge and those who control its commercial destiny. This gap fueled by transnational corporations, platform monopolies, and neoliberal trade regimes, undermines local agency and exacerbates inequality. Traditional Knowledge Digital Libraries, open-source movements, and cooperative patent pools have attempted to respond, yet remain peripheral without robust legislative backing. Both countries must prioritize laws that enable fair benefit-sharing, strengthen antimonopoly safeguards, and challenge unjust contractual clauses that appropriate local creativity. The implementation of compulsory licensing mechanisms, protection against abusive patent evergreening, and restructured copyright exceptions are not merely regulatory tweaks-they are foundational to recalibrating the legal-political economy of knowledge. Such reforms empower grassroots creators, researchers, and indigenous communities to reclaim control over their intellectual contributions. The future of IP law in South Asia should be forged not in the shadow of Western legal transplantation, but through a sovereign, postcolonial jurisprudence

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rooted in ethical plurality and constitutional vision. Constitutional courts in both India and Bangladesh have intermittently acknowledged the tension between IP and fundamental rights; however, this must evolve into a sustained doctrinal engagement. Adaptive legal frameworks that anticipate the complexities of artificial intelligence, digital platforms, and bio-genomic data are vital. Regional collaboration, via the South Asian Association for Regional Cooperation (SAARC) or other forums, can enable harmonized yet locally sensitive policies that resist extractive global regimes. The fusion of constitutional morality, ethical inclusivity, and regional solidarity offers a pathway to reimagine IP not as a barrier, but as a bridge—between innovation and justice, tradition and transformation, autonomy and community.

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