Trends in Intellectual Property Research

Innovative

Article

Intellectual Property Rights, TRIPS and SDGs in Bangladesh

Md. Josim Uddin* **and Arafat Hossen**

Department of Law, European University of Bangladesh, Dhaka, 1216, Bangladesh; arafathossen.law.bubt@gmail.com
* Correspondence: josimuddinllb38@gmail.com

Abstract: Intellectual property rights (IPRs), when strategically designed and implemented, can support poverty reduction, promote sustainable industrialization, and protect cultural heritage. For Bangladesh, which is set to graduate from the LDC category in 2026, the transition poses a critical moment to align its evolving IP framework with its national SDG commitments. But there's lots of room for growth and innovation through smart exploitation of IP. This study explores the linkage between IP policies and SDGs by analysing the implications of these policies on different sectors such as technology, health, agriculture and environmental. By examining Bangladeshi legal and institutional structures for IP, and highlighting the system's shortcomings, modifications are recommended to bring IP practices in line with the global sustainable development objective. The research features the potentials and challenges of balancing between public access to necessities and the protection of their IP, particularly in food security, affordable health and clean energy, which play an important role in facilitating the SDGs. A smart, pro-development IP governance based on TRIPS flexibilities, promotion of geographical indications (GIs), support to creative industries and green technology diffusion can materially advance Bangladesh's 2030 commitments while cushioning post-LDC transition risks.

Keywords: intellectual property; sustainable development goals; intellectual property laws; IP reforms

1. Introduction

United Nations in 2015, floated the sustainable development goals (SDGs), to respond the most pressing challenges of poverty, inequality, climate change, environmental degradation, prosperity, and peace and justice by 2030. The SDGs indicate that innovation, creativity and technology can lead humanity where it needs to go. Intellectual property (IP) plays a significant role in encouraging innovation and protecting the rights of creators, as clean air does for the sustainable growth of human beings. The relationship between intellectual property (IP) and sustainable development is a subject of growing academic and policy attention. IP systems, when designed and implemented with development objectives in mind, can facilitate innovation, technology transfer, and the protection of cultural heritage (Maskus 2012). The United Nations' 2030 Agenda explicitly recognizes innovation and creativity as critical enablers for multiple sustainable development goals. SDG 9 (Industry, Innovation, and Infrastructure) includes a target to *"enhance scientific research, upgrade the technological capabilities of industrial sectors, and encourage innovation"* (United Nations 2015).

Widespread counterfeiting and piracy of products from pharmaceuticals and garments to software and music are major problems. Weak enforcement capacity, judicial delays, and a lack of public awareness undermine the entire IP system. The informal economy's reliance on counterfeit goods further complicates enforcement efforts. Foreign investors are more likely to invest in a country with a predictable and reliable IP system. A strong legal framework for protecting trademarks, patents, and trade secrets reduces the risk of imitation and counterfeiting, which builds confidence among international businesses. This contributes to SDG 17 (partnerships for the Goals) by facilitating global partnerships and technology transfer.

Strong IP protection stimulates research and development by granting inventors time-limited exclusive rights, thereby creating incentives for innovation and creative output (Park and Juan 2007). However, excessive IP protection can hinder access to essential goods, restrict knowledge diffusion, and deepen global inequities. The debate is particularly intense in sectors like pharmaceuticals, where patents may lead to higher prices and limited access to medicines in low-income countries (Baker 2009).

Bangladesh is approaching graduation from least developed country (LDC) status on November 24, 2026, a milestone that will materially reshape its IP obligations and opportunities. IP law reforms are a central, though sometimes underexplored, component of this transition. Historically,

Citation: Md. Josim Uddin, and Arafat Hossen. 2025. Intellectual Property Rights, TRIPS and SDGs in Bangladesh. *Trends in Intellectual Property Research* 3(2), 27-34. https://doi.org/10.69971/tipr.3.2.2025.60

LDC status provided Bangladesh with extended compliance timelines under the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), especially in pharmaceuticals and technology transfer. These flexibilities have been instrumental in enabling local generic drug production, supporting low-cost access to medicines, and allowing policy space for innovation in agricultural and industrial sectors (Rahman 2021). Recent legal reforms the Patents Act (brought into force in 2025), the Industrial Designs Act 2023, and the Copyright Act 2023 modernize core IP statutes and interact in complex ways with the country's Sustainable Development Goals (SDGs) agenda. These developments coincide with growing interest in how IP can drive inclusive economic growth, enhance innovation, and promote sustainable practices core themes of the SDGs (WIPO 2022).

Least developed countries (LDCs) like Bangladesh enjoy special flexibilities under the TRIPS Agreement, including extended transition periods and exemptions for certain sectors, such as pharmaceuticals. These flexibilities are designed to give LDCs policy space to build technological capacity before implementing full TRIPS compliance. Such flexibilities have enabled countries like Bangladesh to develop robust generic pharmaceutical industries and protect traditional cultural expressions through sui generis systems like geographical indications (Zaman 2025). Yet, the LDC transition is temporary. Upon graduation, countries must eventually implement full TRIPS standards, potentially increasing technology acquisition costs and altering domestic innovation ecosystems (Azam 2024). For Bangladesh, this shift poses significant implications for SDG 3 (good health and well-being) and SDG 9, as it may affect both access to affordable medicines and the ability of local firms to innovate. Table 1 lists the flexibilities available to Bangladesh under TRIPS.

Bangladesh's transition from a least developed country (LDC) toward middle-income status presents both opportunities and challenges in aligning its intellectual property (IP) regime with the sustainable development goals (SDGs). While TRIPS flexibilities have enabled affordable medicines production and traditional knowledge protection, post-LDC graduation obligations may tighten patent and copyright standards, potentially affecting health, innovation, and cultural industries. This paper examines the interplay between IP policy and the SDGs in Bangladesh, drawing on global literature, legal frameworks, and case studies of Geographical Indications (Jamdani, Hilsa), copyright reform, and pharmaceutical access. Governance challenges and policy recommendations are offered to ensure that IP law serves as a tool for inclusive and sustainable development.

Table 1. TRIPS flexibility provisions relevant to SDGs in Bangladesh.

Flexibility	Current Status in Bangladesh	SDG Link
Compulsory licensing	Not yet codified in clear terms	SDG 3
Bolar exception	Limited	SDG 3, 9
Parallel importation	Unclear legal status	SDG 3
GI protection	Operational since 2016	SDG 8, 11, 12
Copyright limitations & exceptions	Narrow	SDG 4, 16

However, our knowledge about the relationship between intellectual property and sustainable development within policy and practice is poor. This study examines the role of IP in advancing Bangladesh's SDGs, analyzes the opportunities and risks associated with post-LDC TRIPS compliance, and proposes strategic pathways to leverage IP for sustainable development. This study identifies how IP can stimulate rural value chains through GIs, enhance access to technology via patent information systems, and support climate resilience through clean technology licensing. It also warns of potential setbacks in public health and affordable access to medicines if TRIPS flexibilities are not maintained or adapted after LDC graduation.

2. Methods

This study employs a qualitative policy analysis approach, combining legal text review, secondary data analysis, and targeted case studies. The paper uses a goal-mapping approach linking specific IP tools (e.g., patents, trademarks, GIs, copyright) to individual SDG targets. It also evaluates potential trade-offs based on the Access-Innovation Balance Model, which assesses how IP rules affect both the creation of and access to innovations. Case studies were chosen based on demonstrated economic and cultural significance in Bangladesh, clear relevance to at least one SDG target and availability of credible data from government, academic, or international sources.

3. Results and Discussion

Used strategically with a focus on access, diffusion and inclusivity IP can catalyze innovation, rural value addition, creative employment and climate adaptation. The policy frontier is less about "more" or "less" IP, and more about better IP: development-oriented rules, smart institutions, and evidence-driven implementation that keep the SDGs in clear view (Fardeen 2023). Bangladesh's SDG strategy, is coordinated by the Planning Commission. The country's 2025 voluntary national reviews (VNRs) outlines national progress and remaining gaps across the 17 SDGs, and its SDG tracker provides indicator-level monitoring to guide policy. In parallel, the Department of Patents, Designs and Trademarks (DPDT) and the Ministry of Industries have pursued IP law reform and institutional upgrades. DPDT functions as the national IP office and hosts a Technology and Innovation Support Center (TISC), part of WIPO's network to improve access to patent information and IP services for.

Every property has various designations. The two most crucial aspects are possession and features. Property means something that belongs to you or that is lawfully in your possession. This can be something of value such as a house, car, or furniture, or can be intangible property such as a stock certificate or a copyright. Owning a property endows certain rights - freedom to use, sell or transfer the asset. Another name for feature is property. The "properties of water", are ability to move or change state to become a gas.

According to Article 152 of the Constitution of the People's Republic of Bangladesh: *'Property' refers to any kind of property, including movable or immovable, corporeal or incorporeal, as well as economic and industrial endeavors, as well as any right or interest in any of these*.[1]

Intellectual property is derived from the work of the mind, whether inventions, literary and artistic works, designs, or symbols, names and images used in commerce. It includes copyright, trademarks, patent designs, trade secrets, geographical indications and others. It is the non-physical subject of property rights and the legal possession of the intellectual work in the field of commerce, science, literature, and art. As stated in the WIPO Copyright Treaty, "intellectual property shall include rights relating to works of literature, art, and science; performances by performing artists, phonograms, and broadcasts; innovations in all domains of human activity; scientific revelations; industrial designs; trademarks, service marks, and trade names and designations; safeguarding against unfair competition, and all additional rights arising from intellectual endeavors in industrial, scientific, literary, or artistic domains". The IP jurisdiction in Bangladesh covers copyright, trademark, patent, and design, and GIs only. Other intangibles are presently not protected by statute.

3.1 Intellectual Property Laws of Bangladesh

Bangladesh's IP regime is administered primarily by the Department of Patents, Designs and Trademarks (DPDT), under the Ministry of Industries, with copyright governed by the Ministry of Cultural Affairs. As an LDC, Bangladesh has benefited from extended TRIPS transition periods, most notably for pharmaceuticals until 1 January 2033.

The Patents, Design and Trademarks Act, 1883[2] was the first IP legislation which was built upon Patents and Design Act, 1911.[3] Parliament adopted a new Patents Act (Act No. 5 of 2022), replacing the colonial-era Patents and Designs Act of 1911 with modern patent standards and public health safeguards. The Bangladesh Patents Act 2022 came into force on April 11, 2022, following its publication in the official Gazette.[4] It introduced updated definitions of novelty, inventive step, and industrial applicability; formalized provisions for compulsory licensing; and retained critical public health safeguards in line with TRIPS flexibilities. For Bangladesh, maintaining robust compulsory licensing provisions is essential for ensuring access to medicines (SDG 3) as the country moves toward post-LDC graduation. However, the 2022 Act was subsequently repealed and replaced by the Bangladesh Patents Act, 2023, which came into force on February 27, 2025.[5] This new Act not only superseded the 2022 legislation but also marked a further evolution in the country's patent regime. The 2023 Act introduced institutional reforms, including the transfer of administrative powers, the establishment of a clearer court structure for patent-related disputes, and the streamlining of procedures. It aligns more closely with WIPO-administered international agreements, reinforcing both legal clarity and global compatibility.

Alongside this, the Industrial Designs Act 2023 (Shilpa Naksha Ain, 2023) was enacted, fully separating design protection from the patent regime and replacing the design provisions that had existed since 1911.[6] It modernized the framework for registration, duration, and enforcement of industrial designs, extending protection to 15 years, subject to renewal. The Act supports Bangladesh's creative industries including textiles, handicrafts, and fashion design contributing directly to SDG 8 (decent work and economic growth) and SDG 12 (Responsible Consumption and Production). Together, the Bangladesh Patents Act 2023 and the Industrial Designs Act 2023 represent a comprehensive transformation of Bangladesh's intellectual property landscape, enhancing legal predictability, promoting innovation, and ensuring alignment with both public health priorities and international commitments. Table 2 summarizes IP law reforms of Bangladesh.

Table 2. IP Law reforms in Bangladesh (2009-2025).

Year	Legal Instrument	Key Features	Relevant SDGs
2023	The Bangladesh Patents Act 2023	Modern patent definitions; compulsory licensing; public health safeguards; replaced 1911 & 2022 Act	SDG 3, SDG 9
2023	The Industrial Designs Act 2023	Standalone design protection; 15-year term; alignment with WIPO standards	SDG 8, SDG 12
2023	The Copyright Act 2023	Digital rights; performers' rights; traditional cultural expressions; enforcement upgrades	SDG 8, SDG 11, SDG 12
2013	The Geographical Indication of Goods Act 2013	GI registration for Jamdani, Hilsa; applications for crafts and agricultural products	SDG 1, SDG 8, SDG 11
2009	The Trademarks Act 2009	Mark registration; brand protection; supports MSME market access	SDG 8, SDG 9

The Trademarks Act of 1940 was adopted to safeguard intellectual property rights pertaining to trademarks. Prior to the Trademarks Act 1940, trade marks were protected under the Penal Code of 1860.[7] The Trade Mark Ordinance 2008 replaced Trademarks Act 1940. Parliament passed the Trademarks Act in 2009. The Trademarks Act 2009 (and 2015 Rules) remains the primary law for

1 The Constitution of People's Republic of Bangladesh. http://bdlaws.minlaw.gov.bd/act-367.html
2 The Patents, Design Trademarks Act, 1883. https://www.legislation.gov.uk/id/ukpga/Vict/46-47/57
3 The Patents and Design Act, 1911. http://bdlaws.minlaw.gov.bd/act-94.html
4 The Bangladesh Patents Act 2022. http://bdlaws.minlaw.gov.bd/act-1401.html
5 The Bangladesh Patents Act 2023. http://bdlaws.minlaw.gov.bd/act-1472.html
6 The Industrial Designs Act 2023 (Shilpa Naksha Ain, 2023) http://bdlaws.minlaw.gov.bd/act-1439.html
7 The Penal Code, 1860. http://bdlaws.minlaw.gov.bd/act-11.html

marks. In accordance with the TRIPS agreement, Bangladesh passed the new law on intellectual property in 2013, named the Geographical Indication of Goods (Registration and Protection) Act. This act provides a sui generis system for place-based products under which products such as Jamdani (2016) and Hilsa (2017) have received GI recognition. GIs hold potential for rural development, tourism promotion, and cultural preservation (SDGs 1, 8, and 11).

Additionally, the Copyright Act of 2000 was passed by Parliament repealing Copyright Ordinance of 1962. Bangladesh enacted a new Copyright Act 2023[8], repealing the Copyright Act 2000 (as amended 2005), with updates for traditional cultural expressions, creative industries, digital uses, rights management and enforcement. It introduced protections for performers' rights, audiovisual works, and online streaming platforms, supporting the expansion of Bangladesh's creative economy.

The Department of Patents, Designs and Trademarks (DPDT) under the Ministry of Industries administers patents, designs, trademarks, and GIs. DPDT also hosts a Technology and Innovation Support Center (TISC), part of WIPO's network, which provides access to patent databases, technology search tools, and training for innovators. Expansion of TISC services beyond Dhaka is seen as a strategic priority to broaden innovation capacity nationwide.

3.2 Intellectual Property and Specific SDGs in Bangladesh

The alignment between intellectual property (IP) tools and the Sustainable Development Goals (SDGs) in Bangladesh is both direct and multi-layered. While patents, copyrights, trademarks, and geographical indications (GIs) serve distinct functions, they converge in their potential to promote inclusive growth, innovation, and environmental sustainability. This section examines how each IP category interacts with key SDGs in the Bangladeshi context.

3.2.1 Patents and SDG 9 (Industry, Innovation, and Infrastructure)

Patents incentivize research and development (R&D) by granting inventors exclusive rights for a limited period. In Bangladesh, the new Patents Act 2023 modernizes patentability criteria and strengthens procedural transparency, which can encourage domestic innovation and attract foreign investment. The establishment of technology and innovation support centers (TISCs) further enhances access to patent databases and technical know-how, enabling universities and small- and medium-sized enterprises (SMEs) to participate in high-value innovation. However, graduation from LDC status in 2026 will require Bangladesh to fully comply with TRIPS obligations earlier than the general LDC pharmaceutical waiver expiry (2033). Without careful policy measures, this may constrain local firms' capacity to produce affordable generic medicines and certain technologies, posing risks for SDG 3 and SDG 9.

3.2.2 Geographical Indications and SDGs 1, 8, and 11

GIs protect products whose qualities or reputation are tied to their place of origin, creating market differentiation and potential premium pricing. GIs can support rural development, preserve traditional knowledge, and promote sustainable agricultural practices. For rural Bangladesh, GIs can enhance farmer incomes (SDG 1), create decent work (SDG 8), and preserve cultural heritage (SDG 11). Jamdani the fine, handwoven muslin saree tradition concentrated around Rupganj and Sonargaon was among Bangladesh's first geographical indications (GI). GI protection aims to secure reputation, deter mislabeling, and create price premia that can be reinvested in artisan communities (Belletti et al. 2015). The Jamdani GI supports artisanal weaving communities, while the Hilsa GI has implications for sustainable fisheries management. The potential for GIs in other products such as Nakshi Kantha**,** Fazli mango, and Shatkora citrus remains high, provided producer groups receive marketing and governance support. However, the benefits of GIs are not automatic; they depend on effective governance, quality control, and marketing strategies. Hilsa (*Tenualosa ilisha*) is Bangladesh's national fish and a major export and nutrition source. GI status can complement, but not replace the fisheries management (closed seasons, mesh-size rules). Table 3 details linkages of GIs with SDG in Bangladeshi context.

Table 3. Selected GIs of Bangladesh and their potential SDG impact (Rahman 2018, Ahmed 2022).

GI	Registration Year	Primary SDG Link
Jamdani saree	2016	SDG 8, 11, 12
Hilsa fish	2021	SDG 14
Nakshi Kantha	2016	SDG 5, 8
Bogra Yogurt	2019	SDG 8, 12

3.2.3 Copyright and SDGs 8, 11, and 12

Copyright fosters the growth of creative industries, which are significant contributors to GDP and employment in many economies. Bangladesh's Copyright Act 2023 strengthens protections for digital works, performers' rights, and traditional cultural expressions, enabling greater commercialization of music, film, and design (Mahatab 2020). This supports SDG 8 through job creation, SDG 11 by safeguarding cultural heritage, and SDG 12 by encouraging sustainable cultural production cycles.

3.2.4 Trademarks and SDGs 8 and 9

Trademarks protect brand identity and build consumer trust. For Bangladeshi SMEs, especially in the textile and agro-processing sectors, trademarks can facilitate export readiness and market access, aligning with SDG 8 (economic growth) and SDG 9 (industrialization). Trademark protection also complements GI registration, as producers can use both systems strategically to maximize product recognition domestically and internationally.

3.2.5 IP, Climate Action, and SDG 13

[8] The Copyright Act of 2023. http://bdlaws.minlaw.gov.bd/act-1452.html

Climate change adaptation and mitigation require the dissemination of environmentally sound technologies. IP rights intersect with climate action primarily through the diffusion of green technologies. Participation in WIPO GREEN and the use of patent landscaping for renewable energy solutions can help Bangladesh adapt to climate change. Policies promoting voluntary licensing and patent pools for clean technologies will be crucial to ensuring affordable access, particularly in solar, wind, and flood-resilience infrastructure (Maskus 2012). For climate-vulnerable countries like Bangladesh, IP policy must balance incentives for green innovation with affordable access to adaptation technologies particularly in agriculture, coastal protection, and renewable energy.

3.2.6 Genetic Resources, Traditional Knowledge, and SDG 15

The 2024 WIPO Treaty on Intellectual Property, Genetic Resources and Associated Traditional Knowledge introduces disclosure requirements for patent applicants who use genetic resources or associated traditional knowledge. For biodiversity-rich Bangladesh, this framework could help prevent biopiracy while promoting equitable benefit-sharing with local communities. Table 4 shows association between an IP tool and its allied SDG in the context of Bangladesh.

Table 4. Mapping IP tools to SDG targets in Bangladesh.

IP Tool	Relevant SDG(s)	Mechanism of Contribution	Key Risks/Trade-offs
Patents	SDG 9, SDG 3	Incentivizes R&D; promotes industrial capacity; facilitates tech transfer via TISCs.	May increase costs of medicines and essential tech post-LDC graduation.
Geographical Indications	SDG 1, SDG 8, SDG 11	Supports rural incomes; preserves cultural heritage; promotes sustainable tourism.	Requires strong governance and quality control.
Copyright	SDG 8, SDG 11, SDG 12	Stimulates creative economy; protects cultural expressions; promotes sustainable cultural production.	Enforcement challenges; digital piracy.
Trademarks	SDG 8, SDG 9	Builds brand value; facilitates SME export competitiveness	Risk of brand misappropriation if enforcement is weak.
Genetic Resources/TK	SDG 15	Protects biodiversity; prevents misappropriation; supports benefit-sharing.	Implementation complexity; need for legal clarity.

3.3 Core SDGs and Their Connectivity with IP in Bangladesh

SDG 9 (Industry, Innovation and Infrastructure)

A modern patent and design system supplemented by TISCs can stimulate domestic R&D, improve technology search/absorption by SMEs, and support university–industry collaboration (Bangladesh Industrial Design Act 2023).

SDG 8 (Decent Work and Economic Growth) & SDG 1 (No Poverty)

Trademarks and GIs help MSMEs move up value chains through differentiation and reputation signaling. Bangladesh's GI regime has already registered Jamdani (2016) and Hilsa Hilsa/Ilish (2017), with evidence that expanded GI portfolios (e.g., Nakshi Kantha, Fazli/Khirsapat mango) could support rural incomes, craft preservation and tourism linkages if managed with producer-centric governance (Zahur 2018).

SDG 3 (Good Health and Well-Being)

The combined effect of TRIPS transition flexibilities and a calibrated patent law (including compulsory license and government-use provisions) is central to safeguarding access to medicines, vaccines and biologics. Analyses warn of price/availability impacts after graduation, underscoring the need for timely measures (e.g., strategic use of TRIPS flexibilities, regulatory preparedness, procurement policies) (Islam et al. 2022).

SDG 12 (Responsible Consumption and Production) & SDG 11 (Sustainable Cities and Communities)

Copyright and related rights underpin creative industries textiles and fashion design, music, film, publishing and digital content supporting circular design and sustainable cultural ecosystems. Global studies show creative economies contribute materially to GDP and jobs; Bangladesh's 2023 copyright reform and enforcement upgrades can help formalize and finance these sectors.

SDG 13 (Climate Action) & SDG 7 (Affordable and Clean Energy)

Access to clean-tech is often mediated by IP. Participation in WIPO platforms (e.g., WIPO GREEN partnerships) and leveraging non-exclusive licensing and patent information can hasten diffusion of climate-resilient technologies in energy, agriculture and coastal protection-critical for a climate-vulnerable delta economy.

SDG 15 (Life on Land) & genetic resources

The 2024 WIPO Treaty on Intellectual Property, Genetic Resources and Associated Traditional Knowledge establishes disclosure obligations regarding genetic resources and associated TK in patent filings. As biodiversity-rich Bangladesh builds its patent system, adopting treaty-consistent disclosure could deter biopiracy and align innovation with conservation.

3.4 Case Studies

Jamdani, a hand-woven muslin saree tradition recognized by UNESCO as intangible cultural heritage, became Bangladesh's first GI in November 2016. Hilsa the national fish was officially registered as the second GI in 2017. These registrations demonstrate how GIs can protect reputation, deter misappropriation, and potentially command price premiums; however, benefits depend on producer organization, quality control, and marketing (Zahur 2018).

Empirical modeling suggests that post-graduation IP compliance may raise prices for some patented therapeutics (e.g., insulin), affecting household welfare among patients. Ensuring that the new Patents Act preserves public-health safeguards (compulsory licenses, Bolar exception, parallel import where lawful) is crucial to avoid SDG 3 setbacks (Islam 2022).

With the Copyright Act 2023, Bangladesh updated digital rights and enforcement, a prerequisite for monetizing local content in streaming, gaming and online publishing. Coupled with trade and export promotion for creative services an area growing rapidly worldwide and this can expand quality jobs while reinforcing cultural heritage (SDGs 8, 11, 12).

4. Governance Challenges

Modern laws must be matched by examination capacity, IT systems and predictable timelines at DPDT; TISC services should scale beyond Dhaka post-registration governance (producer consortia, control plans, traceability) remains uneven; maximizing farmer/artisan income requires robust GI management and export strategies (Chowdhury and Kabir 2023). Graduation compresses TRIPS timelines; IP policy should be integrated with industrial, health, trade, and innovation strategies outlined in the national SDG machinery (VNR, SDG Tracker) (Bangladesh Voluntary National Review 2025).

5. IPR issues in Bangladesh, Post TRIPS Graduation Scenario and Policy Recommendations

As a developing country, Bangladesh has many challenges in the field of IPRs. To address the new challenges of development and growth, technological innovations are crucial. Information and technology have become the engines of recent economic growth globally. Bangladesh is still behind in this race and new ideas and inventions are not coming from Bangladeshi researchers. There are about 100 public and private universities in Bangladesh. But none of these institutions teach IP laws. To contribute to the growth and development of IP rights in Bangladesh, business community and IP practitioners have to be more proactive. Efficient management of the IPs needs strong institutions and governance structures. The integration of IP in national sustainable development strategies such as Bangladesh Climate Change Strategy and Action Plan (BCCSAP) is not adequate, resulting in disparate implementation. There is poor coordination among government institutions, universities and private sector in the commercialization of research and development. Red tape and petty corruption stymie those would-be innovators, particularly SMEs, who wish to obtain IP protection.

Bangladesh invests less on research and development (R&D) compared to its GDP. This limits the creation of patentable innovation and technology. The access of poorer communities to IP-driven innovations is impeded by a lack of access to modern technology and the internet, in particular in rural areas. Bangladesh does not have a broad and open IP database system making it hard to monitor existing patents, trademarks, and copyrights resulting double and conflicting claims. The high cost of registering IP rights makes it difficult for many inventors even entrepreneurs to obtain and maintain IP rights. Most of Bangladesh's economy is informal, and there's almost no IP enforcement, so it is quite difficult for people to formalize and innovate. Being a least developed country (LDC), Bangladesh has some flexibility while adhering to and transitioning under the TRIPS agreement. Details of WTO provisions applicable after graduation are shown in Table 5. However, after expiry of this status in 2026, it will be subject to tougher rules on IP, potentially resulting in higher costs, and making cheap technology harder to access.

Bangladesh is scheduled to graduate from LDC status on November 24, 2026. Under WTO decisions, LDCs enjoy:

(a) A general TRIPS transition (most TRIPS obligations deferred) until July 1, 2034 or until graduation (whichever comes first)
(b) A separate pharmaceutical transition that exempts LDCs from granting pharmaceutical product patents and test-data protection until January 1, 2033 (again, ceasing upon graduation).

Recommendation to Cope These Problems

Examination quality, pendency times, and digitization at DPDT must keep pace with new laws; regional TISC coverage remains limited (Maskus 2012). TISC network should be expanded to universities/SMEs to promote patent landscaping in green tech and agri-resilience to support SDGs 7, 9 and 13.

Weak producer organizations and control plans risk middleman capture should be improved. Fragmented export branding should be integrated (Belletti et al. 2015). Copyright management organizations (CMOs) require governance reforms; piracy enforcement should shift toward notice-and-action systems and proportionate remedies (WIPO 2022). Copyright-secured lending pilots and collective management reforms can be used to improve incomes in music, film and digital design; align with global insights on creative-economy growth.

Drug-regulatory circulars clarifying Bolar, reliance pathways without exclusivity, and timelines for therapeutic areas with the highest budget impact should be issued. A joint IP-competition-drug authority should be constituted for price monitoring and anti-competitive conduct review in priority medicines. Investment incentives aligned with quality milestones, logistics parks for cold-chain biologics, and export readiness can be initiated. Public-health safeguards should be Operationalized; and procedures for compulsory licensing/government use to preserve access during health emergencies should be prepared (Islam and Apurbo 2023).

High-potential products (e.g. Nakshi Kantha, regional mangoes, handicrafts), build producer groups should be registered if not yet, and linked to rural development and tourism programs with export-market branding (Chowdhury and Kabir 2023). IP "graduation playbook" can be published to sequence legal, regulatory and procurement steps from 2025–2027, aligned with VNR monitoring especially for pharma, diagnostics and biologics.

Table 5. TRIPS flexibility checklist for Bangladesh (post-graduation focus).

Parameter	Role in SDGs	Status to confirm/operationalize post-2026
Compulsory licensing (CL) & government use (TRIPS Art. 31)	Safeguards SDG 3 access during public-health needs; supports SDG 9 by enabling learning-by-doing.	Ensure clear grounds (public health, anti-competitive conduct, emergency), streamlined procedures, and rapid timelines; publish SOPs.
Art. 31bis export/import mechanism	Enables import of medicines produced under CL elsewhere; vital for SDG 3.	Prepare administrative rules/templates to activate imports if needed.
Bolar/early-working exception	Lets generics do tests/registration before patent expiry; speeds entry; SDG 3.	Embed explicit regulatory guidance to avoid litigation bottlenecks.
International exhaustion & parallel import	Allows buying patented goods abroad at best prices; SDG 3 & 9.	Adopt/clarify exhaustion regime to permit price-arbitrage where lawful.
Competition law interface	Controls abuse of IP rights (e.g., refusals to license, excessive pricing).	Issue competition-IP enforcement notes; coordinate agencies.
Data protection (test data)	Balance innovators' interests with public health.	Avoid TRIPS-plus exclusivity; rely on protection against unfair commercial use without blocking reliance for generics.
Patentability standards & exclusions	Keeps patents to genuine inventions; protects TK/GR; SDG 15.	Maintain strict novelty/inventive step; adopt disclosure of origin consistent with 2024 WIPO GRs Treaty (when implementing).
Patent linkage (avoid)	Prevents regulatory authority from being a patent enforcer.	Do not introduce linkage; keep drug approval independent of patent disputes.
TISC & patent information	Accelerates technology absorption; SDG 9 & 13.	Scale TISC training outside Dhaka; institutionalize patent landscaping in green tech.
Procurement & pooled licensing	Leverages price/volume for access; SDG 3.	Use pooled procurement, voluntary licenses, WHO prequalification alignment.
API/biologics industrial policy	Reduces import dependence; creates jobs; SDG 8 & 9.	Target incentives for API, biosimilars, fill-finish; quality upgrades for PQ/EMA.
GI & creative-economy tie-ins	Diversifies exports, rural income; SDG 1, 8, 11, 12.	Fast-track GI pipeline; strengthen collective management and branding.

If done right, IP can spur innovation, promote economic growth and assist with addressing social and environmental problems. In Bangladesh, there is a lack of awareness among Bangladeshi policymaker, private sector and even its general population about using intellectual property (IP) to achieve the SDGs. High costs and complex procedures associated with IP protection make it difficult for small businesses, startups and those in developing countries to gain access to them, hence stifling inclusive development.

To address the challenges and optimize the IP to achieve the SDGs in Bangladesh, targeted interventions are required. Launching targeted awareness-raising and capacity-building initiatives for policy-makers, business, and the general public, demonstrating the potential of IP to help achieve SDGs by stakeholders. Amending relevant IP regulations can ensure that they are consistent with the sustainable development by benefitting innovations, and encouraging the welfare of society and the environment simultaneously. Tax breaks, grants and subsidies to agriculture, technology and pharmaceuticals can lead to new IP achieving SDGs. Slashing the cost of IP registration and enforcement will allow small companies, start-ups, and underserved communities to use and benefit from IP protections. Promoting public-private R&D investment with funding programs, public-private partnerships, and academic-industry correlation can also help. Capacity building programs of IP offices and enforcement agencies is another area to improve.

6. Conclusions

Intellectual property (IP) can be used to support social inclusion, economic development and environmental sustainability in the context of Sustainable Development Goals (SDGs).The study highlights that IP can help Bangladesh achieve the Sustainable Development Goals (SDGs) through innovation, economic development, and social justice. Currently this potential is not being adequately exploited due to legal lacunas, inability of institutions and the lack of awareness of stakeholders. By strengthening its legal and institutional frameworks, promoting awareness, and strategically using the flexibilities available to it, Bangladesh can harness the power of intellectual property to accelerate its journey towards achieving the SDGs. Bangladesh can harness IP as a powerful instrument to achieve its SDGs by ensuring that its IP policies are consistent with sustainable development principles. This will ensure that everyone can grow and indeed support a sustainable future.

References

Ahmed Arif. 2016. Enforcement of intellectual property rights (IPRs) in Bangladesh: an appraisal. *IOSR Journal of Humanities and Social Science* 21: 37-46. https://www.iosrjournals.org/iosr-jhss/papers/Vol.%2021%20Issue4/Version-3/D0214033740.pdf.

Alam, Shamsul. 2021. Bangladesh Moving Ahead with Sustainable Development Goals. *General Economics Division, Bangladesh Planning Commission*:1-92. https://www.greenpolicyplatform.org/sites/default/files/downloads/resource/PEA-PEI-Others-5BANGLADESH%20MOVING%20AHAD%20WITH%20THE%20SUSTAINABLE%20DEVELOPMENT%20GOALS.pdf.

Azam, M. 2024. *Closing the Gaps to the LDCs−Technology Transfer under International Law on Climate Change and Intellectual Property*. https://www.diva-portal.org/smash/get/diva2:1916589/FULLTEXT01.pdf.

Baker, Brook K. 2009. Patents, Pricing, and Access to Essential Medicines in Developing Countries. *Virtual Mentor* 11: 527-532. http://dx.doi.org/10.1001/virtualmentor.2009.11.7.pfor1-0907.

Belletti, Giovanni, Andrea Marescotti, and Jean-Marc Touzard. 2015. Geographical Indications, Public Goods, and Sustainable Development: The Roles of Actors' Strategies and Public Policies. *World Development* 98: 45-57. http://dx.doi.org/10.1016/j.worlddev.2015.05.004.

Chowdhury, Mohammad Aktarul Alam, and Kabir Fahim Hasnath. 2023. Revisiting the Geographical Indication Regime in Bangladesh: TRIPS Compatibility and Prospective Challenges. *UUM Journal of Legal Studies* 14: 89-111. https://repo.uum.edu.my/id/eprint/29373/1/UUMJLS%2014%2001%202023%2089-111.pdf.

Fardeen, Bin Abdullah. 2023. *The Bangladesh Patent Act* 1: 1-44. http://dx.doi.org/10.5281/zenodo.14162125.

Islam, Md. Deen, Warren A. Kaplan, Veronika J. Wirtz, and Kevin P. Gallagher. 2022. The Social Costs of Success: The Impact of World Trade Organization Rules on Insulin Prices in Bangladesh upon Graduation from Least Developed Country Status. *Asian Development Review* 39: 239-279. https://www.adb.org/sites/default/files/publication/784871/adr-vol39no1-7-social-costs-success-bangladesh.pdf.

Islam, Mohammad Towhidul, and Apurbo Sadman Rizwan. 2023. Revisiting the Patent Regime of Bangladesh: Compatibility with TRIPS and International Best Practices. *Journal of Intellectual Property Law & Practice* 18: 512-527. https://academic.oup.com/jiplp/article-abstract/18/7/512/7199591?redirectedFrom=fulltext

Mahatab, Uddin. 2020. Impact of Intellectual Property Rights over Food Security in Developing and Least Developed Countries. *Journal of Judicial Administration Training Institute* 20 : 191-203. https://ssrn.com/abstract=3966540

Maskus, Keith E. 2012. *Private Rights and Public Problems: The Global Economics of Intellectual Property in the 21st Century*. Washington, DC: Peterson Institute Press. http://dx.doi.org/10.1017/S1474745613000189.

Park Walter G., and Juan Carlos Ginarte. 2007. Intellectual property rights and economic growth. *Contemporary Economic Policy* 15:51-61. https://doi.org/10.1111/j.1465-7287.1997.tb00477.x.

Rahman, Md. Mizanur 2021. Achieving Sustainable Development Goals of Agenda 2030 in Bangladesh: The Crossroad of the Governance and Performance. *Public Administration and Policy: An Asia-Pacific Journal* 24: 195-211. https://www.emerald.com/insight/content/doi/10.1108/PAP-12-2020-0056/full/html.

United Nations. 2015. Transforming Our World: The 2030 Agenda for Sustainable Development. http://sdgs.un.org/2030agenda.

WIPO. 2022. Sustainable Development Goals Intellectual Property. https://www.wipo.int/en/web/sdgs.

Zahur Mahua. 2017. The Geographical Indication Act 2013: Protection of Traditional Knowledge in Bangladesh with Special Reference to Jamdani. http://dx.doi.org/10.1017/9781316711002.019.

Zaman, Rakin Uz. 2025. Leveraging TRIPS Flexibilities for Bangladesh's Pharmaceutical Industry Post-LDC Graduation. *Development Letters* 6:1-2. https://www.researchgate.net/publication/389747475_Leveraging_TRIPS_Flexibilities_for_Bangladesh's_Pharmaceutical_Industry_Post-LDC_Graduation#full-text.