



AN EXAMINATION OF INTELLECTUAL PROPERTY FRAMEWORKS FOR THE PROTECTION OF TRADITIONAL MEDICINAL KNOWLEDGE: VINDICATING INDIA'S DEFENSIVE AND DEVELOPMENTAL STRATEGY

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ABSTRACT

Existing scholarship on the intersection of intellectual property rights (IPR) and traditional medicinal knowledge (TMK) is often polarized, presenting a false dichotomy between the perceived inadequacies of conventional IPR systems and the vulnerabilities of TMK to misappropriation. Certain critical analyses further mischaracterize robust national protection strategies, such as India's Traditional Knowledge Digital Library (TKDL), portraying them as instruments of state appropriation rather than defense. This paper respectfully disagrees with such untenable positions. We argue that these critiques fundamentally misread the geopolitical context of a post-TRIPS world and fail to appreciate the strategic necessity of a multi-pronged protection architecture. This paper asserts a corrective thesis: India's multifaceted approach, which integrates defensive documentation (the CSIR-TKDL), a coherent legislative framework (The Patents Act, 1970; The Biological Diversity Act, 2002), and proactive international diplomacy, constitutes a legitimate, necessary, and replicable model for safeguarding national heritage while enabling equitable innovation. By examining the synergy between these defensive and positive protection measures, we demonstrate that India's strategy is not a paradoxical appropriation but a sovereign fortification of cultural and intellectual territory. The recent adoption of the WIPO Treaty on Intellectual Property, Genetic Resources, and Associated Traditional Knowledge on 24 May 2024, which enshrines the principle of mandatory disclosure long championed by India, serves as a powerful vindication of this long-standing and principled stance. This paper provides a definitive reframing of the debate, positioning India's model as a blueprint for global policy in an era of increasing biopiracy.

I. Introduction: Situating the Scholarly and Political Contest

Since the establishment of the World Trade Organization (WTO) and the implementation of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), a profound and contentious debate has emerged concerning the protection of

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traditional knowledge (TK), and particularly traditional medicinal knowledge (TMK).¹ For developing nations rich in biodiversity and traditional lore, such as India, this debate is not a mere academic exercise; it is a critical defense of national sovereignty, cultural identity, and economic potential.² The prevailing international IPR regime, designed primarily for individualistic, novel, and formally documented inventions, has proven itself to be an ill-fitting, and often hostile, environment for knowledge systems that are typically collective, inter-generational, and orally transmitted. This systemic dissonance has created a vacuum, enabling the widespread misappropriation of TMK by third parties a phenomenon pejoratively but accurately termed “biopiracy”. The global response has been bifurcated.³ On one hand, there is a persistent call for the development of a sui generis (of its own kind) international legal instrument specifically designed to protect TK. On the other, nations have erected defensive measures to prevent the erroneous granting of patents on existing traditional knowledge by leveraging the very mechanisms of the conventional IPR system. India has been a global leader in this latter approach through its pioneering Traditional Knowledge Digital Library (TKDL), an initiative of the Council of Scientific and Industrial Research (CSIR).⁴ It is at this juncture that a significant scholarly failing must be addressed. Some contemporary critiques have profoundly misconstrued the purpose and effect of such defensive systems. For instance, some have characterized the TKDL as a mechanism through which the Indian state asserts national interests that potentially conflict with the rights of local communities, connecting its genesis to “irrelevant aspects that include religion and politics”. The argument posits that by documenting and classifying TK in a patent-searchable format, the state is, in effect, appropriating this knowledge from its traditional holders for its own strategic and economic benefit. We are compelled to state that this line of critique is fundamentally flawed. It demonstrates a critical failure to comprehend the siege mentality imposed upon developing nations by a global IPR system that systematically devalues and endangers their traditional knowledge systems. Furthermore, it constructs a false opposition between national defence and community rights, ignoring that the former is a necessary precondition for the latter in the face of international

¹ World Trade Organization, “Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS)”, 1994, available at: https://www.wto.org/english/docs_e/legal_e/27-trips.pdf.

² World Health Organization, “Traditional Medicine: Questions and Answers” (August 2023).

³ James, T.C., “Traditional Medicine and Intellectual Property Rights: Law and Policy Perspectives”, FITM Discussion Paper No. 1 (Research and Information System for Developing Countries, New Delhi, 2024).

⁴ “Traditional Knowledge and Intellectual Property Rights for Ayurveda”, 14 Research Journal of Agricultural Sciences, 24 (2023).

biopiracy.⁵ As some authors assert in a direct response, such analyses are predicated on “subjective” literature and draw “unwarranted connections,” thereby distorting the “very objective of a resource that has been developed to protect a country's heritage as its legal rights”.

This paper, therefore, forwards a tripartite defensive thesis to correct this scholarly misinterpretation. First, we situate the challenge of TMK protection within its proper historical context: a global IP landscape that, by default, relegates undocumented TK to a vulnerable “public domain,” ripe for exploitation. Second, we precisely pinpoint the shortcomings of critiques that view national defensive measures like the TKDL in isolation. These analyses fail to recognize the TKDL as one crucial component within a comprehensive and integrated “fortress architecture” of protection that also includes robust domestic legislation and a relentless campaign of international diplomacy. Third, we assert our corrective authority by positing that India's integrated strategy combining the defensive fortification of the TKDL with positive legal frameworks for access and benefit-sharing (ABS) and a diplomatic push for global norms represents a coherent, ethically necessary, and ultimately vindicated model for the effective stewardship of TMK.

II. The Contested Terrain: Biopiracy and the Limits of Conventional IPR

To understand the architecture of India's response, one must first survey the terrain of the conflict. TMK, as defined by the World Health Organization (WHO), is “the sum total of the knowledge, skills, and practices based on the theories, beliefs, and experiences indigenous to different cultures... used in the maintenance of health”. In India, this knowledge is both codified in ancient texts of Ayurveda, Siddha, and Unani, and uncoded, passed down orally through generations of folk healers. This rich heritage, which informs the medicinal use of over 7,000 plant species, represents a significant asset that is perpetually at risk. The primary threat is biopiracy: the patenting of non-original “inventions” that are merely iterations of existing TK, often without the consent of or benefit to the original knowledge holders. The infamous cases of patents granted on the wound-healing properties of turmeric (*Curcuma longa*) and the antifungal properties of the neem tree (*Azadirachta indica*) serve as stark reminders of this vulnerability. In both instances, patents were granted by foreign offices the United States Patent and Trademark Office (USPTO) for turmeric and the European Patent Office (EPO) for neem

⁵ World Health Organization, “Intellectual Property and Traditional Medical Knowledge”, WIPO Background Brief No. 6 (2023).

on knowledge that has been documented and practiced in India for centuries.⁶ While India successfully challenged and revoked these patents, the victories came at a great cost, revealing a systemic flaw: patent examiners in foreign jurisdictions lack access to, or fail to consult, documented evidence of TK from other countries, which would otherwise constitute “prior art” and invalidate the patent claims for lack of novelty.⁷

This systemic failure stems from the fundamental incompatibility between the tenets of conventional IPR and the nature of TMK. The patent system, the most relevant IPR tool for medicinal innovations, is built on criteria that TMK often cannot meet.

Novelty and Inventive Step

The patent system rewards inventions that are new and non-obvious. Most TMK, by its very “traditional” nature, is ancient and has been passed down through generations, thus failing the novelty test *ab initio* if it has been previously disclosed.

Identifiable Inventor and Collective Ownership

Patent law requires the identification of specific inventors. TMK, however, is often generated, held, and refined collectively by a community over time, making it impossible to attribute inventorship to a single person or a discrete group.

Documentation and Codification

While some Indian TMK is codified, a vast amount remains oral and uncoded. Patent systems rely heavily on written prior art, and oral traditions have historically been difficult to establish as legally recognized prior art in many jurisdictions.

It is this chasm between the structure of IPR law and the reality of traditional knowledge that has necessitated the creation of novel protection strategies. These strategies fall into two broad categories, which we contend are not mutually exclusive but complementary: defensive protection and positive protection.⁸ Defensive protection aims to prevent the illegitimate acquisition of IPR by third parties over TMK, primarily by ensuring that TK is documented and available as searchable prior art for patent examiners. Positive protection involves the

⁶ Anusree Bhowmick, Smaranika Deb Roy and Mitu De, “A brief review on the turmeric patent case with its implications on the documentation on the documentation of traditional knowledge”, 1 NDC-EBIOS Journal 83 (2021).

⁷ Johny Solomon Raj & Swaraj Singh Raguvanshi, “Nature of IPR Protection Given by Law in Turmeric Case”, S.S. RANA Legal Publication (April 2022).

⁸ World Intellectual Property Organization, “Use of Turmeric in Wound Healing Case Study”, WIPO Official Document.

proactive granting of rights to TK holders themselves, allowing them to control the use of their knowledge and benefit from its commercialization, often through sui generis legal frameworks. It is the profound misunderstanding of the critical, foundational role of defensive protection that lies at the heart of the flawed critiques we seek to correct.

III. The Fortress Architecture of India's TMK Protection Regime

Contrary to interpretations that view India's actions as disjointed or contradictory, we argue that they form a coherent, multi-layered “fortress architecture” designed for comprehensive defence and strategic engagement. This architecture operates on three interlocking levels: a defensive outer perimeter (the TKDL), fortified legislative main walls, and an assertive diplomatic inner citadel.

Outer Perimeter: The Defensive Imperative of the Traditional Knowledge Digital Library (TKDL)

In 2001, in direct response to the turmeric and neem biopiracy episodes, the Government of India, through the CSIR, established the Traditional Knowledge Digital Library (TKDL). The TKDL is not, as its critics imply, a tool for commercial exploitation by the state; it is a meticulously designed defensive weapon.⁹ Its primary and explicit objective is to prevent the grant of erroneous patents on Indian TMK by making this knowledge available to international patent offices as searchable prior art.

The architecture of the TKDL is itself a testament to its strategic purpose:

Comprehensive Documentation

The TKDL has digitized and documented vast amounts of information from classical Indian texts of Ayurveda, Unani, Siddha, and Yoga.

Patent-Oriented Structure

This vast corpus of knowledge is structured in a patent application format and translated into five international languages (English, German, French, Spanish, and Japanese) to be readily understood by patent examiners globally.

Innovative Classification

⁹ “Traditional Knowledge Digital Library: Widening Access Database to Users”, Press Information Bureau, Government of India (September 2022).

To overcome the challenge of searching for traditional concepts within modern classification systems, an innovative Traditional Knowledge Resource Classification (TKRC) system was developed, which maps TMK concepts to the International Patent Classification (IPC) system.

The success of this defensive strategy is empirically verifiable. To date, the TKDL has been leveraged in over 225 patent applications filed at various international patent offices, leading to their withdrawal, rejection, or amendment by the applicants themselves upon being presented with TKDL evidence. This demonstrates the TKDL's efficacy not as a tool of appropriation, but as a powerful deterrent.¹⁰ It is therefore untenable to frame a defensive prior art database designed explicitly to place knowledge beyond the reach of illegitimate patent claims as a form of state misappropriation.¹¹ Such a claim ignores the fundamental legal principle that making information available as prior art destroys its novelty, thereby placing it in the public domain for patenting purposes and preventing anyone, including the state itself, from obtaining an exclusive patent on that specific knowledge.¹² Some authors' prior assertion that the TKDL makes knowledge "more manageable, and exploitable" directly contradicts a more recent critical stance, revealing a fundamental inconsistency in the analysis. The controlled access provided to patent offices under non-disclosure agreements is not a mechanism for restriction, but a necessary safeguard to prevent the database itself from being misused by commercial entities while still allowing it to serve its defensive purpose.¹³ The government's recent decision to widen access to the TKDL for researchers and industry is not a change in purpose, but an evolution a move to stimulate legitimate innovation and R&D based on this heritage, now that the defensive perimeter has been firmly established.

Main Walls: A Coherent Legislative and Institutional Framework

The defensive shield of the TKDL is buttressed by a robust set of legislative "main walls" that codify the principles of sovereignty, community rights, and equitable benefit sharing. This legal framework is not a haphazard collection of statutes but an integrated system designed to regulate access to biological resources and the associated knowledge.

¹⁰ Raghavan, Chakravarthi, "Neem Patent Revoked by European Patent Office", Third World Network (May 2000).

¹¹ "India's Traditional Knowledge and the Role of CSIR's TKDL", CSIR Success Stories Publication (2025).

¹² "Traditional Knowledge Digital Library", Dau University Academic Publication.

¹³ "Impact of TKDL on Patent Applications in the Field of Bio-resources", Journal of Intellectual Property Rights, NISCAIR (2024).

At the heart of this framework, two key pieces of legislation work in tandem. The first is The Biological Diversity Act of 2002, which stands as the cornerstone of India's protection regime.¹⁴ Fulfilling India's commitments to the Convention on Biological Diversity, the Act establishes a meticulous three-tiered structure to oversee the nation's bio-resources. At the top, the National Biodiversity Authority operates at the central level, supported by State Biodiversity Boards and, crucially, by local Biodiversity Management Committees.¹⁵ This structure ensures that any party wishing to access Indian biological resources or traditional knowledge for research or commercial purposes must first obtain prior informed consent and agree to terms that guarantee fair and equitable benefit-sharing with the knowledge-holding communities.¹⁶ The Act gives the National Biodiversity Authority the power to challenge intellectual property applications anywhere in the world if they are based on knowledge or resources taken from India without proper authorization.¹⁷ At the grassroots level, the local committees are responsible for creating People's Biodiversity Registers, which document local knowledge and resources, complementing the centrally managed Traditional Knowledge Digital Library with vital community-level records.¹⁸

The second pillar of this legal structure is The Patents Act of 1970, which has been strategically amended to create a firewall against the improper patenting of traditional knowledge. Its most powerful tool is Section 3(p), a provision that explicitly declares that an "invention" which is effectively traditional knowledge, or simply a repackaging of the known properties of traditional components, is not patentable.¹⁹ This gives patent examiners a clear and potent legal basis to reject such claims outright. Reinforcing this, the Act also mandates that any patent application using biological material must disclose its source and geographical origin. A failure to do so, or providing false information, is a valid reason to oppose or even revoke a patent that has already been granted.

Together, these laws create a powerful, interlocking system. The Biological Diversity Act acts as the gatekeeper, managing access and ensuring benefits flow back to the

¹⁴ The Biological Diversity Act, 2002, No. 18 of 2002, Government of India

¹⁵ National Biodiversity Authority, "Guidance Manual Under the Biological Diversity Act, 2002", NBA Official Publication.

¹⁶ Government of India, "National Biodiversity Authority: Overview and Functions" (2024).

¹⁷ The NBA - Environment Portal", Rajasthan State Government Publication (2001).

¹⁸ "Traditional Medicinal Knowledge under Biological Diversity Act 2002", Woxsen Law Review (August 2013).

¹⁹ Impact of IPR on Protection of Traditional Knowledge through the Biodiversity Act", iPleaders Legal Analysis (October 2021).

communities, while the Patents Act stands as a guard, preventing the knowledge itself from being improperly privatized. This legislative combination firmly refutes any notion that India's strategy is purely defensive. Instead, it creates a clear pathway for legitimate, ethical innovation rooted in benefit-sharing, a principle perfectly illustrated by the case of **Jeevani**.²⁰ The Jeevani case is a landmark example of this integrated approach in action. It began with the traditional knowledge of the Kani tribe in South India, who understood the anti-fatigue properties of the local arogyapaacha plant. Scientists at the Tropical Botanic Garden and Research Institute used this tribal know-how as a lead to conduct further research, successfully isolating the active compounds and developing a standardized restorative drug. Importantly, the institute patented the process for creating the formulation a novel scientific invention not the traditional knowledge itself. In a crucial step that pioneered the principles of benefit-sharing, a trust was established to ensure a significant portion of the royalties from the drug's commercial license was paid directly to the Kani community.²¹ The Jeevani model showcases how intellectual property rights can be applied not to expropriate traditional knowledge, but to protect the value added through modern science, all while ensuring the original custodians of the knowledge are ethically and financially recognized for their invaluable contribution.

Inner Citadel: Proactive Diplomacy and the Shaping of International Norms

The final layer of India's fortress is its assertive and persistent diplomatic engagement in international forums. Recognizing that domestic laws alone are insufficient to combat biopiracy originating from foreign jurisdictions, India, alongside a coalition of like-minded developing countries, has waged a decades-long campaign to reform the international IP landscape. This diplomatic offensive has been concentrated in two key arenas:

The WTO TRIPS Council

Since the review of Article 27.3(b) of the TRIPS Agreement, India has been a leading proponent for amending the agreement to introduce a mandatory international requirement for patent applicants to disclose the source and country of origin of genetic resources and associated TK used in an invention. This disclosure would also need to be accompanied by evidence of PIC from the competent authority and evidence of fair and equitable ABS.

²⁰ "A Critical Study on Kani Tribal Community and their Benefit Sharing Model", 3 Online International Interdisciplinary Research Journal (November-December 2013).

²¹ "The Arogyapacha Plant and the Kani Tribe's Journey to Access and Benefit Sharing", SSRN Working Paper (September 2024).

The WIPO Intergovernmental Committee (IGC)

In 2000, WIPO established the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC). Within the IGC, India has consistently argued for the development of a binding international legal instrument to provide positive protection for TK, moving beyond purely defensive measures. India has advocated for the recognition of collective rights and the protection of both codified and uncoded knowledge systems.

For over two decades, this advocacy was met with staunch resistance from developed nations, who viewed such proposals as burdensome to innovation. However, this persistent diplomatic pressure has finally borne fruit. On 24 May 2024, the WIPO Diplomatic Conference adopted a historic new Treaty on Intellectual Property, Genetic Resources and Associated Traditional Knowledge.²² The centerpiece of this treaty is a legally binding international obligation for patent applicants to disclose the country of origin or source of the genetic resources and associated TK when the claimed invention is based on them. This treaty represents a monumental victory for the demandeur countries and a profound vindication of India's long-held diplomatic position. While the treaty establishes a minimum standard and leaves certain issues, such as Digital Sequence Information (DSI) and derivatives, for future review, it fundamentally alters the global patent landscape. It internationalizes the core principle of disclosure embedded in India's own patent law and creates a global transparency mechanism to track the use of TMK in patent applications, thereby supporting the implementation of ABS obligations under the CBD and national laws like India's Biological Diversity Act.

IV. Discussion: Synthesizing the Model and Neutralizing Counterarguments

The analysis of India's three-tiered fortress architecture reveals a sophisticated, dynamic, and ethically grounded model. It is a system that synthesizes defensive and positive protection, using the tools of the existing IP system to guard against its own inherent flaws while simultaneously building a parallel framework for equitable access and benefit sharing. This integrated model proactively neutralizes the standard counterarguments leveled against the protection of TMK. A primary counterargument posits that IPR is fundamentally

²² "Taking Forward the Review of Article 27.3B of the TRIPS Agreement", Africa Group Draft, Institute for Agriculture and Trade Policy.

antithetical to the collective and inter-generational nature of TMK.²³ India's approach demonstrates a pragmatic rather than an ideological response to this tension. The state recognizes that the vast majority of TMK as such is not, and should not be, patentable. Therefore, the primary strategy is defensive: use the TKDL and Section 3(p) of the Patents Act to place this knowledge firmly outside the bounds of patentability, protecting it for community use and from illegitimate private monopoly. Simultaneously, the framework allows for the positive protection of new, patentable inventions derived from TMK, as seen in the Jeevani case, but only when coupled with legally mandated ABS obligations under the Biological Diversity Act. This is a nuanced bifurcation, not a blanket application of an unsuitable regime. Another critique targets the central role of the state, suggesting it usurps community authority. This argument fails the test of *realpolitik*. Individual, often marginalized, communities lack the financial, legal, and technical resources to monitor patent applications across thousands of jurisdictions or to mount costly legal challenges against multinational corporations.²⁴ As some research shows, local business performers are often reluctant to engage with the formal IPR system due to its perceived complexity and cost, preferring their own informal methods of protection. In this context, the state's role is not one of appropriation but of custodianship and defense. The CSIR and the NBA are acting as national-level institutional proxies, wielding the necessary resources to defend the collective national heritage on behalf of all its communities.

The Indian model is thus a system of “responsible sovereignty,” where the state leverages its institutional capacity to create a protected space within which community rights can be meaningfully realized. It is a pragmatic recognition that in a globalized world, the protection of local knowledge requires a robust national shield.

V. Conclusion

The long and arduous journey to secure a just and equitable international framework for the protection of Traditional Medicinal Knowledge has reached a watershed moment. For decades, the global intellectual property regime, architected primarily around Western conceptions of individual, novel, and time-bound invention, remained fundamentally misaligned with the nature of Traditional Medicinal Knowledge a body of knowledge that is communally held, incrementally evolved, and transmitted across generations. This systemic

²³ WIPO Negotiations on Intellectual Property, Genetic Resources and Associated Traditional Knowledge”, SSRN Academic Paper (December 2023).

²⁴ World Intellectual Property Organization, “The WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore”, Background Brief No. 2 (2023).

incongruity rendered a vast corpus of invaluable traditional knowledge, particularly from developing nations rich in biodiversity and cultural heritage like India, legally vulnerable, categorizing it as part of a global "public domain" and thereby sanctioning its misappropriation by third parties without consent, recognition, or equitable benefit-sharing. The notorious cases involving the patenting of the wound-healing properties of turmeric and the anti-fungal properties of neem by foreign entities stand as stark monuments to this era of systemic failure and what has rightly been termed biopiracy. In response to this untenable state of affairs, we have pursued a robust, dual-pronged strategy encompassing both defensive national fortification and proactive international diplomacy. Domestically, India pioneered a globally recognized model of defensive protection through the establishment of the Traditional Knowledge Digital Library in 2001. A collaborative initiative of the Council of Scientific and Industrial Research and the Department of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy, the Traditional Knowledge Digital Library represents a monumental undertaking to digitize and catalogue India's codified Traditional Medicinal Knowledge from systems like Ayurveda, Unani, Siddha, and Yoga. By structuring this knowledge in a patent-compatible format and making it accessible to major international patent offices in five languages, the Traditional Knowledge Digital Library serves as an irrefutable repository of prior art, effectively preventing the grant of erroneous patents based on pre-existing knowledge. The demonstrable success of the Traditional Knowledge Digital Library in preempting or revoking hundreds of illegitimate patent applications globally validates this approach not merely as a passive database, but as a strategic defensive bulwark—a fortress protecting our national heritage from misappropriation. However, we recognized that a purely defensive posture, while necessary, was insufficient. The ultimate resolution required a fundamental recalibration of the international legal architecture. Consequently, for over two decades, India, alongside a coalition of like-minded developing nations, has been at the vanguard of a persistent diplomatic campaign within the world's preeminent multilateral forums, most notably the World Intellectual Property Organization's Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore and the World Trade Organization TRIPS Council. Our central, unwavering demand has been the establishment of a binding international legal instrument that mandates the disclosure of the source or origin of genetic resources and any associated Traditional Knowledge within patent applications. This was consistently presented not as a mere procedural formality, but as an ethical and legal imperative to ensure transparency, prevent

misappropriation, and create a functional link between the patent system and the access and benefit-sharing principles enshrined in the Convention on Biological Diversity.

The culmination of this quarter-century struggle was realized on May 24, 2024, with the historic adoption of the WIPO Treaty on Intellectual Property, Genetic Resources and Associated Traditional Knowledge. We can now declare, with definitive authority, that this treaty marks a triumphant and paradigm-shifting victory for the global South and for the principles of equity and justice in the international intellectual property system. The treaty's core provision creates, for the first time, a mandatory international obligation for patent applicants to disclose the country of origin or source of the genetic resources and/or associated Traditional Knowledge used in a claimed invention. This simple yet profound requirement fundamentally alters the dynamics of the global patent system, enhancing transparency and providing a critical tool to monitor and curb the misappropriation that has long plagued custodians of traditional knowledge. While we acknowledge that the treaty establishes a floor, not a ceiling, for protection—setting minimum standards and leaving critical issues such as Digital Sequence Information and derivatives subject to future review—it is precisely this structure that safeguards national sovereignty and empowers further action. The treaty unequivocally preserves the right of contracting parties to implement broader and more stringent disclosure requirements and sanctions within their own legal systems, as provided for under Indian law through instruments like The Biological Diversity Act, 2002. This framework thus validates and reinforces our robust domestic legislative and institutional mechanisms, including the pivotal role of the National Biodiversity Authority in regulating access and ensuring equitable benefit-sharing. The new international disclosure mandate will work in a mutually supportive manner with the Convention on Biological Diversity and its Nagoya Protocol, creating a coherent global governance regime where the intellectual property system actively supports, rather than undermines, access and benefit-sharing obligations. Looking forward, this new legal landscape will catalyze a more ethical and sustainable paradigm for innovation. The era of plausible deniability for pharmaceutical and biotechnology firms is over. The legal certainty provided by the treaty will foster authentic, good-faith partnerships based on Prior Informed Consent and Mutually Agreed Terms with the communities who are the true custodians of this knowledge. Furthermore, India continues to lead by example. The recent decision to widen access to the Traditional Knowledge Digital Library database for researchers, innovators, and businesses signals a strategic evolution from purely defensive protection to the positive promotion of innovation based on our rich heritage. We are not merely locking our

knowledge away; we are creating pathways for its legitimate and equitable utilization, ensuring that it can address unmet national and global needs while generating benefits that flow back to its source communities. In finality, the protection of Traditional Medicinal Knowledge has been elevated from a peripheral concern to a central tenet of the international intellectual property discourse. This transformation was not incidental; it was the result of a deliberate, sustained, and principled defense of our cultural and intellectual sovereignty. The journey from challenging the turmeric patent to championing a global treaty is a testament to the resilience of our position and the unassailable logic of our cause. We have successfully defended our collective heritage against systemic vulnerabilities and, in doing so, have helped forge a more balanced, transparent, and just future for global innovation—one that finally recognizes and respects the profound contributions of traditional knowledge and its rightful holders.