

iii. Introduction to the Indian patent office...

iii. Introduction to the Indian patent office and National Biodiversity Authority and their role in the protection of TKS, Different types of IPR protection in India, Indian Legislations - Patents Act of India (1970); Biological Diversity Act (2002), Convention of Biological Diversity (1992), Plant Protection Variety and Farmers Rights Act (2001) and Geographical Indication Act 1999 etc. with respect to TKS

Introduction to the Indian Patent Office and National Biodiversity Authority

Indian Patent Office (IPO)

1. Structure and Jurisdiction

- The Indian Patent Office functions under the **Office of the Controller General of Patents, Designs & TradeMarks (CGPDTM)**, Ministry of Commerce and Industry.
- Regional branches (Kolkata, Delhi, Mumbai, Chennai) handle patent filing, examination, opposition, and grant processes.

2. Role in TKS Protection

- **Patent Examination:** Ensures that inventions claiming novelty do not overlap with **prior art** found in **Traditional Knowledge**.
- Collaboration with the **Traditional Knowledge Digital Library (TKDL)**: Patent examiners access the TKDL database containing documentation of Ayurveda, Unani, Siddha, and Yoga formulations/practices in various languages. This resource helps identify prior art and prevent bio-piracy.
- **Public Opposition Proceedings:** Stakeholders (communities, NGOs) can submit evidence if a patent application infringes on TKS or fails to disclose sources of origin of biological resources.

3. Challenges

- Balancing incentives for genuine innovation with defensive protection of well-known or culturally embedded practices.
- Complexities in analyzing multi-component herbal formulations or procedures that are collectively owned by communities rather than a single inventor.

National Biodiversity Authority (NBA)

1. Establishment and Purpose

- Formed under the **Biological Diversity Act (2002)** to regulate access to India's biological resources and ensure **equitable benefit-sharing** with local communities.
- Headquarters in Chennai. Collaborates with State Biodiversity Boards and local Biodiversity Management Committees.

2. Functions Related to TKS

- **Approvals for Access:** Individuals or organizations (domestic or foreign) seeking to utilize India's biodiversity for research or commercial exploitation must obtain prior approval from the NBA if they involve certain thresholds of foreign participation or export.
- **Benefit-Sharing:** Formulates guidelines for **Access and Benefit Sharing (ABS)**, ensuring local communities who hold TKS receive royalties, licensing fees, or in-kind benefits when resources or associated knowledge is commercialized.
- **Protection Against Biopiracy:** By requiring disclosure of source of biological material and ensuring prior informed consent (PIC), the NBA helps deter misappropriation of TK-based resources.

3. Collaborations with Other Bodies

- Works alongside the **Ministry of AYUSH, State Biodiversity Boards, IPL** (Intellectual Property Law) enforcement agencies, and local communities to maintain synergy in TKS protection.

Different Types of IPR Protection in India with Respect to TKS

Patents

1. Scope and Exclusions

- Protects inventions that are new, involve an inventive step, and are industrially applicable.
- **Exclusions** relevant to TKS: Section 3 of the Patents Act excludes “traditional knowledge” or “agricultural methods” if they lack novelty or are mere discoveries of existing known substances.
- A strong defensive measure is the **Traditional Knowledge Digital Library (TKDL)**, which patent examiners use to check novelty claims against documented Indian systems of medicine.

2. Disclosure Requirements

- Applicants must disclose the **source and geographical origin** of any biological material used, in compliance with the Biological Diversity Act.
- Failure to disclose or misrepresentation can lead to revocation or refusal of the patent.

Copyright

1. Expression of Traditional Knowledge

- Protects original “literary, artistic, musical works,” including potential **compilations, translations, theatrical expressions** of TK.
- Typically used less for *medicinal knowledge* itself, but can safeguard documentation, folklore, or textual representations (treatises, community manuscripts).
- **Community ownership** issues: Standard copyright frameworks revolve around individual or corporate authors, complicating group-based TKS.

Trademarks and Certification Marks

1. Branding TK-based Products

- Producers of herbal medicines, crafts, or GI-labeled items can register **trademarks** to build brand identity.
- Community associations can file for collective or certification marks to certify authenticity or community origin (e.g., “Kangra Tea,” “Warli Painting”).

Geographical Indications (GI)

• GI as TKS Protection

- Protects products whose **quality, reputation** are essentially linked to a specific locality (e.g., “Darjeeling Tea,” “Mysore Silk,” “Chanderi Fabric”).
- Allows local producers who meet region-specific standards to use the GI label.
- Encourages rural development, preserves heritage, ensures the socio-economic rights of producers.

Plant Variety Protection (PPV&FR)

• Plant Varieties and Farmers’ Rights Act (2001)

- Recognizes rights of breeders (who develop new plant varieties) and **traditional farmers** (who conserve landraces and wild relatives).
- Farmers can register their traditional varieties, gaining recognition and benefit-sharing if commercial breeders utilize them.
- Encourages on-farm conservation of agro-biodiversity, safeguarding TKS in crop breeding.

Trade Secrets

• Undisclosed Knowledge

- In contexts where communities keep knowledge secret (e.g., certain herbal formulations), trade secret law can apply.
- However, secrecy conflicts with possible knowledge erosion if not documented, highlighting the complexities of intangible heritage protection.

Indian Legislations and International Treaties with Respect to TKS

Patents Act of India (1970, as amended)

1. Key Features

- Post-TRIPS amendments aligned Indian patent law with WTO standards.
- Provisions to exclude or limit patentability for **traditional knowledge** if it does not meet novelty or inventive step.
- Mandates **disclosure of origin** of biological resources (Section 10(4)(d)).

2. Implications for TKS

- Ensures that mere re-labelling of known Ayurvedic formulations or uses cannot be patented.
- Strengthens the defensive stance against foreign patents on Indian herbal remedies.

Biological Diversity Act (2002)

1. Access and Benefit-Sharing (ABS)

- People seeking to utilize Indian biological resources for commercial R&D must secure approval from the National **Biodiversity Authority (NBA)**.
- Equitable sharing of monetary or non-monetary benefits with local communities if TKS is utilized.

2. Local Biodiversity Management Committees (BMCs)

- Created at panchayat/municipal levels to prepare **People's Biodiversity Registers (PBR)** documenting local biodiversity and TK, vital for asserting prior art.

Convention on Biological Diversity (CBD, 1992)

1. Core Principles

- Recognizes **sovereign rights** of nations over their biological resources; encourages **conservation, sustainable use, and fair and equitable sharing** of benefits arising from resource utilization.
- Empowers countries to pass domestic laws (like India's BD Act) to operationalize these principles.

2. Relevance to TKS

- Reaffirms the role of **Prior Informed Consent (PIC)** from communities, acknowledging customary rights over knowledge.
- Bolsters the stance that TKS is not merely public domain but under the stewardship of indigenous groups.

Plant Protection Variety and Farmers Rights Act (2001)

1. Farmers' Exemptions

- Farmers can save, use, exchange, or sell farm-saved seeds (non-branded).
- Affirms **Farmers' Rights** to register indigenous varieties, ensuring credit and benefit-sharing if breeders or companies use them for new variety development.

2. Community Rights

- Communities can claim compensation if a registered new variety is derived from local varieties without acknowledging the community's role.

Geographical Indication of Goods (Registration and Protection) Act (1999)

1. Scope

- Protects GI-labeled goods (foodstuffs, handicrafts, textiles, natural goods) ensuring authenticity and link to a region's cultural/traditional heritage.
- Excludes cases where knowledge is commonly known or intangible cultural expressions not tied to a specific product.

2. Examples

- Darjeeling Tea, Mysore Silk, Banarasi Saree, Channapatna Toys.
- Provides impetus for local producers to organize, maintain quality standards, protect brand identity from counterfeiters.



Concluding Remarks

India's approach to safeguarding **Traditional Knowledge Systems** (TKS) is multifaceted, combining **IPR** tools (patents, GIs, PVP, trade secrets), **biodiversity governance** (NBA, BMCs), and **community rights** frameworks. This synergy addresses:

- **Defensive protection** against bio-piracy (through TKDL, patent legislation).
- **Positive recognition** of community stewardship (Biological Diversity Act, PPV&FR Act).
- **Socioeconomic empowerment** (GI for rural livelihoods, farmers' rights for seed saving, ABS for benefit-sharing).

By integrating local knowledge holders, policymakers, and scientific institutions, India seeks to **harness** TKS for innovation in traditional medicine (Ayurveda, Siddha, Unani), **protect** cultural identity, and **generate economic opportunities** while **preventing misappropriation** of its vast cultural and biological heritage. These legislative frameworks—if effectively implemented and enforced—can pave the way for equitable, sustainable exploitation of TKS, benefiting both **community custodians** and **global progress** in health, agriculture, and biodiversity conservation.