

v. WTO, TRIPS, WIPO, CBD, FAO, NAGOYA Protocol

v. WTO, TRIPS, World Intellectual Property Organisation (WIPO), Convention on Biological Diversity (CBD); FAO; Nagoya Protocol on access and benefit-sharing

World Trade Organization (WTO)

Overview

1. Formation and Scope

- Established in 1995 as the successor to the General Agreement on Tariffs and Trade (GATT).
- Aims to facilitate **multilateral trade liberalization** by setting binding rules, reducing trade barriers, and managing dispute settlement.
- IP issues fall under the WTO framework primarily through the TRIPS Agreement.

2. Influence on IP and Biodiversity

- Trade policies can indirectly impact biodiversity and TKS (e.g., market access for agricultural or herbal products, regulation of technology flows).
- Dispute resolutions sometimes engage IP rights enforcement or allegations of misappropriation.

Key Functions

1. Forum for Negotiations

- Member states negotiate modifications to trade rules and push for updates in IP-related aspects (e.g., TRIPS Council discussions on TKS).

2. Dispute Settlement

- The Dispute Settlement Body (DSB) enforces rulings on non-compliance with WTO agreements, including TRIPS.

3. Monitoring

- Regular trade policy reviews analyze how countries implement IP laws, potentially intersecting with biodiversity goals or TKS protection.

Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS)

Origins and Objectives

1. Inclusion in WTO

- TRIPS is Annex 1C of the Marrakesh Agreement establishing the WTO, in force since 1995.
- Harmonizes **minimum standards of IP protection** across WTO members, extending coverage to patents, trademarks, copyrights, geographical indications, etc.

2. Developing and Least Developed Countries (LDCs)

- Transitional periods initially allowed for LDCs to delay full TRIPS implementation, acknowledging capacity constraints.
- Ongoing debates center on flexibilities (compulsory licenses, parallel imports) and TKS or genetic resources not fully addressed by TRIPS.

Provisions Relevant to TKS

1. Patent Requirements and Exclusions

- TRIPS obliges members to grant patents on inventions in all fields of technology, with some exceptions (public health, morality, or “essentially biological processes”).
- Traditional knowledge per se is not explicitly covered or excluded, leading to controversies about “biopiracy” of herbal remedies.

2. Geographical Indications (GIs)

- TRIPS Part II Section 3 outlines GI protection, valuable for branding products with unique local origin and

qualities (e.g., Darjeeling tea).

- Extended GI protection negotiations (beyond wines and spirits) reflect developing nations' push to protect agricultural and artisanal products.

3. Access-Benefit Sharing and Disclosure

- Some countries advocate amending TRIPS to require **mandatory disclosure of origin** of genetic resources used in patent applications, aligning with CBD principles.
- Ongoing proposals—no consensus yet—illustrate tension between trade-liberal IP demands and biodiversity/ABS obligations.

World Intellectual Property Organization (WIPO)

Mandate and Structure

1. Background

- WIPO, established in 1967 (Geneva-based UN agency), aims to promote the protection of IP worldwide through cooperation among member states.
- Administers major IP treaties (Paris Convention, Berne Convention, Patent Cooperation Treaty [PCT], Madrid System for Trademarks, etc.).

2. Role in TKS Protection

3. Intergovernmental Committee (IGC) on IP and Genetic Resources, Traditional Knowledge, and Folklore

- Established to address legal/policy gaps around TKS, genetic resources, traditional cultural expressions.
- Ongoing negotiations explore draft texts, potential international legal instruments that might protect TKS from misappropriation.

4. Technical Assistance and Capacity Building

- WIPO offers training, legislative advice to developing countries on implementing IP laws that can incorporate TKS considerations (e.g., sui generis protections, community protocols).
- Encourages creation of digital libraries (akin to India's TKDL) and helps set best-practice guidelines for TKS documentation.

5. Patent Classification Tools

- Collaboration with India's TKDL to supply patent examiners worldwide with documented prior art, mitigating the granting of erroneous patents on TKS-based innovations.

Convention on Biological Diversity (CBD)

Principles and Scope

1. Adoption and Significance

- Signed at the 1992 Earth Summit (Rio de Janeiro), entered into force in 1993.
- Comprehensive treaty with three key objectives: **biodiversity conservation**, **sustainable use** of its components, and **fair and equitable sharing** of benefits from the use of genetic resources.

2. Recognition of Sovereignty

- A key shift: states have **sovereign rights** over natural resources within their territories and can regulate access to them.
- Encourages **prior informed consent** (PIC) from provider countries (and local communities) for research or commercial utilization of genetic resources, linking to TKS.

Relevance to TKS

1. Article 8(j)

- Specifically addresses the knowledge, innovations, and practices of indigenous/local communities relevant to biodiversity conservation and sustainable use.
- Parties urged to respect, preserve, and maintain TKS, promote its wider application with prior approval, and encourage fair benefit-sharing.

2. Mutually Agreed Terms (MAT)

- Mechanism for negotiating how benefits (royalties, technology transfer, capacity building) are allocated when external parties utilize TKS or associated genetic materials.



Food and Agriculture Organization (FAO)

Overview and Mandate

1. FAO's Role

- A UN specialized agency focusing on **food security**, sustainable agriculture, fisheries, forestry.
- Encourages the conservation of plant and animal genetic resources critical for global food supply and rural livelihoods.

2. Key Agreements

3. International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)

- Also known as the **Seed Treaty**; ensures **farmers' rights**, **multilateral system** of access and benefit-sharing for major food crops.
- Recognizes the vital role of local communities and farmers in developing and maintaining diverse crop varieties.

4. Global Plans of Action

- For example, the Global Plan of Action on Animal Genetic Resources addresses livestock diversity, often grounded in indigenous breeding knowledge.

TKS in Agriculture

1. Traditional Farming Methods

- Soil fertility management, local seed selection, pest control (botanical pesticides), and water management.
- FAO's initiatives underscore the synergy between local knowledge and global agro-biodiversity conservation efforts.

2. Benefit Sharing Mechanisms

- The **Multilateral System** of ITPGRFA fosters equitable benefit-sharing (e.g., funding projects that support smallholder farmers, in situ conservation, etc.).
- Encourages recognition and reward for community-level stewardship of landraces.

Nagoya Protocol on Access and Benefit-Sharing

Background and Core Elements

1. Adoption and Entry into Force

- Supplementary agreement to the CBD, adopted in 2010 (Nagoya, Japan), effective from 2014.
- Operationalizes the CBD's third objective (fair and equitable sharing of benefits).
- Establishes frameworks for obtaining **prior informed consent (PIC)** and negotiating **mutually agreed terms (MAT)**.

2. Scope and Goals

- Covers **genetic resources** (microorganisms, plants, animals) and **traditional knowledge** associated with them, used for R&D or commercial exploitation.
- Aims to ensure that communities/countries providing resources are adequately compensated or recognized.

Key Provisions

1. Compliance Mechanisms

- Parties must ensure users within their jurisdiction comply with foreign countries' ABS laws.
- **Checkpoints** (patent offices, research funders, product approval agencies) can require proof of legal access or PIC documentation.

2. Relationship with TKS

- Emphasizes the role of **indigenous/local communities** who hold TKS linked to genetic resources.
- Encourages measures to document or protect TKS, mandates equity in any commercial or academic usage.

3. Challenges and Implementation

- Variation in domestic implementing laws, capacity constraints for monitoring compliance, and controversies about digital sequence information (DSI).
- Resource providers worry about insufficient transparency from multinational users; users are concerned



about legal uncertainties and administrative burdens.

Concluding Remarks

WTO (through TRIPS), WIPO, CBD, FAO-related treaties, and the Nagoya Protocol collectively shape the global governance of intellectual property, biodiversity, and the rights of local/indigenous communities. Their interplay strongly influences:

- **How TKS is recognized** (avoid biopiracy, ensure prior art documentation, defensive or positive protection).
- **How benefits accrue** to custodians of biological and cultural resources (Access and Benefit-Sharing under CBD/Nagoya, Farmers' Rights in ITPGRFA).
- **The potential for synergy** in sustainable development, from agricultural innovation to new medical leads derived from TKS.

Nevertheless, **legal fragmentation** and **capacity disparities** among nations continue to complicate the uniform adoption of these frameworks. Harmonizing diverse stakeholder interests—pharmaceutical R&D, national economies, indigenous rights, and ecological integrity—remains a dynamic challenge requiring collaborative, inclusive policy making and robust, transparent enforcement mechanisms.