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## **TRADE RELATED ASPECTS OF IPR: A VIABLE TOOL FOR THE ENFORCEMENT OF BENEFIT SHARING**

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### **ABSTRACT**

The Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement has had a considerable impact on worldwide intellectual property rights regulation. However, one of the agreement's major flaws is that it fails to adequately address the issue of benefit sharing, particularly in the context of traditional knowledge and genetic resources. As a result, there is an increasing need for benefit sharing to be enforced via TRIPS. The purpose of this research article is to investigate the feasibility of TRIPS as a tool for benefit sharing enforcement. The presentation starts with a quick summary of TRIPS and its provisions concerning intellectual property rights. The notion of benefit sharing is then discussed, as well as its significance in the context of traditional knowledge and genetic resources.

The research investigates the difficulties connected with benefit sharing enforcement and the limits of TRIPS in resolving these difficulties. The lack of clarity in the concept of traditional knowledge and genetic resources is one of the most significant issues. This makes identifying the true owners of these resources and ensuring that they get their fair share of benefits challenging. Another issue is the absence of effective procedures for enforcing benefit sharing. While TRIPS protects intellectual property rights, it does not provide for the enforcement of benefit sharing. This implies that extra legal and regulatory frameworks are required to guarantee that benefit sharing is implemented. The study then investigates various solutions to these problems. One potential answer is to develop unique mechanisms to conserve traditional knowledge and genetic resources. These solutions would offer a legal foundation for benefit sharing protection and enforcement. Another possible approach is for the parties concerned in the utilisation of traditional knowledge and genetic resources to enter into contractual agreements. These agreements would define the parameters of benefit sharing and provide means for enforcing them. The article suggests that, although TRIPS has limitations in addressing the problem of benefit sharing, it may nevertheless be a useful instrument for benefit sharing enforcement. However, additional legal and policy frameworks, such as sui generis systems and contractual agreements, would be required. The article also

emphasises the significance of including indigenous people and other stakeholders in the creation of these frameworks in order to guarantee their equity and effectiveness.

## LIST OF ABBREVIATIONS

1. TRIPS	Trade-Related Aspects of Intellectual Property Rights
2. CBD	Convention on Biological Diversity
3. IPR	Intellectual Property Rights
4. PCT	Patent Cooperation Treaty
5. GI	Geographical Indication
6. WIPO	World Intellectual Property Organization
7. UPOV	International Union for the Protection of New Varieties of Plants
8. BIODIV	Biodiversity
9. TCE	Traditional Cultural Expression
10. IGC	Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore
11. ABS	Access and Benefit Sharing
12. TK	Traditional Knowledge
13. SPS	Sanitary and Phytosanitary Standards
14. GRTKF	Genetic Resources, Traditional Knowledge and Folklore
15. DUS	Distinctness, Uniformity and Stability
16. PBR	Plant Breeders' Rights
17. TRM	Traditional Resource Rights
18. APEDA	Agricultural and Processed Food Products Export Development Authority
19. UNEP	United Nations Environment Programme
20. WTO	World Trade Organization
21. ISDA	Indian Seed Development Association
22. CoP	Conference of the Parties

23. ITPGRFA	International Treaty on Plant Genetic Resources for Food and Agriculture
24. CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
25. FAO	Food and Agriculture Organization
26. BTF	Biodiversity Trust Fund
27. SUI Generis	Unique or of its own kind
28. Doha Declaration	Declaration on the TRIPS Agreement and Public Health
29. NBPGR	National Bureau of Plant Genetic Resources
30. ABSCH	ABS Clearing House
31. INGR	Indigenous and Local Communities' Rights
32. ITM	Indian Traditional Medicine
33. WTO-TRIPS	World Trade Organization - Agreement on Trade-Related Aspects of Intellectual Property Rights
34. GI Tags	Geographical Indication Tags
35. CGPDTM	Controller General of Patents, Designs and Trade Marks
36. TBGRI	Tropical Botanic Garden and Research Institute
37. ACB	Access and Benefit-Sharing Clearing House

## CHAPTER I: INTRODUCTION

### 1.1 Problem Profile

Intellectual property (IP) protection has been in effect since ancient times, but its contemporary form may be traced back to agreements such as the Paris Convention on Patents<sup>1</sup> and the Berne Convention in the late 19th century<sup>2</sup>. The need of intellectual property protection was highlighted further in the twentieth century with the enactment of various treaties, most notably the Convention on Biological Diversity (CBD)<sup>3</sup> and Trade Related Intellectual Property Rights

<sup>1</sup> Paris Convention, July 14, 1883, 21 U. S. T. 1583.

<sup>2</sup> Berne Convention, Sept. 9, 1886, S. Treaty Doc. No. 99-27.

<sup>3</sup> Convention on Biological Diversity, June 5, 1992, 31 I. L. M. 818.

(TRIPS)<sup>4</sup> These agreements present opportunities and challenges to various stakeholders, with the CBD being more supportive of traditional knowledge custodians' intellectual property interests, The TRIPS Agreement, on the other hand, is seen as more favourable of wealthy nations and international firms. Current Generic Technologies (NGT), notably information and communication technology (ICT) and biotechnology, are crucial under the current intellectual property framework.

However, their monopoly control by multinational corporations, as well as their capital and research-intensive nature, has introduced a new age characterised by new kinds of hegemony and control, which had significant repercussions for emerging nations. With its enlarged breadth and reach, this new IPR regime has contributed current international relations' structure and course seem to be being affected by new elements added to the development debate. Traditional Knowledge (TK) connected to biodiversity as one of the most divisive topics has surfaced in current intellectual property rights debates. Key difficulties have been cited as a disagreement over the best way to protect native resources and the complications engaged in the identification and classification of such resources within the context of intellectual property rights. Following the CBD and TRIPS agreements, IP protection of Traditional Knowledge became a difficult issue.<sup>5</sup> The CBD provides provisions for the intellectual property protection of traditional knowledge. Although the content is in the public domain, the TRIPS Agreement contains restrictions that are critical of and discriminatory towards TK caretakers, frequently limiting their chances and alternatives. This assertion has been supported by studies. India and Kerala have also faced comparable challenges in the IP protection of traditional knowledge, and an assessment of their experiences might give significant insights for academic and policy formation reasons. This is the primary goal of this investigation.<sup>6</sup>

## 1.2 The Intellectual Property and Traditional Knowledge

Intellectual property protection has become more problematic in recent decades, especially in connection to the preservation of Traditional Knowledge. In the 1990s, this problem became more difficult as a result of the negotiation of the WTO (1995) Agreement under the aegis of

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<sup>4</sup> Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement), Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 1869 U. N. T. S. 299.

<sup>5</sup> Anil Kumar Gupta & Kuntala Lahiri-Dutt, *Intellectual Property Rights and Biodiversity Conservation: An Interdisciplinary Analysis of the Values of Medicinal Plants* 3 (1999)

<sup>6</sup> Biju Varkkey, *Intellectual Property Rights and Traditional Knowledge: A Case Study of the Neem Tree*, 1 J. Intell. Prop. Rts. 195 (1996).

GATT (1994). Unlike previous GATT rounds, the Uruguay Round, which started in 1986, featured a variety of additional Words like Trade- TRIPS/TRIMS/GATS and WTO are prefixed with these topics. As a result, the definition of intellectual property protection has changed as far as its nature, scope, duration, and reach. . During this time, the WTO made enforceable traditional knowledge, which refers to Indigenous and local communities' knowledge innovations and cultural practises that uphold traditional ways of life are important for the preservation and sustainable utilisation of biological variety. Traditional knowledge is widely recognised for its relevance in people's economic, social, and cultural life, as well as their advancement. This has been further clearer in recent years as people have become more aware of the environmental catastrophe and how new general technology, industrial techniques, and products have contributed to it. communities have a wide variety of environmentally sound or friendly Traditional Knowledge, practises, and technologies, and they have used the varied biological and genetic resources for application in food, medicine, and other areas. The present increase in public awareness of the value of biodiversity has drawn attention to the importance and significance of traditional knowledge. Farmers, indigenous peoples, and local communities. Knowledge of how to use different forms and types of biological resources for various purposes, as well as how to safeguard these resources, has been seen as an important resource critical to humanity's future advancement or even survival. Overall, intellectual property and traditional knowledge preservation have become more problematic in recent years. This is because people are becoming increasingly aware of the significance of Traditional Knowledge in the economic, social, cultural, and environmental spheres of life.

### **1.3 The role of GATT and WTO**

We must continue to defend and preserve Traditional Knowledge since it is a critical resource for humanity's future. Traditional knowledge protection has grown more difficult and critical in recent years, particularly after the World Trade Organisation (WTO) Agreement<sup>7</sup> was completed in 1995 under the General Agreement on Tariffs and Trade (GATT) in 1994<sup>8</sup>. The Uruguay Round of GATT discussions, which began in 1986, covered new trade-related themes such as Trade-Related Aspects of Intellectual Property Rights (TRIPS), Trade-Related

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<sup>7</sup> Agreement Establishing the World Trade Organization, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 1867 U. N. T. S. 3.

<sup>8</sup> General Agreement on Tariffs and Trade, Oct. 30, 1947, 61 Stat. A3, 55 U. N. T. S. 187.

Investment Measures (TRIMS),<sup>9</sup> and the General Agreement on Trade in Services (GATS).<sup>10</sup> As a consequence, intellectual property (IP) protection's nature, scope, breadth, and duration have been redefined. The GATT Agreement incorporated and made enforceable the preservation traditional knowledge, which is the term used to describe the knowledge, creations, and customs of indigenous and local people that are crucial to the preservation and sustainable use of biological diversity. Traditional knowledge is widely recognised for its value in people's economic, social, and cultural life, as well as their advancement.

This recognition has grown in Increasingly in recent years as a consequence of rising understanding of the environmental issue, the contribution of new generic technology, manufacturing techniques, and goods to the crisis, and the importance of local communities have a varied spectrum of ecologically sound or friendly traditional knowledge, practises, and technology, as well as a long history of harnessing different biological and genetic resources for food, medicines, and other reasons.

#### **1.4 The Bio Diversity and Local Community**

The present increase in awareness of biodiversity's significance in a range of industries has emphasised the significance of traditional knowledge. Local residents', farmers', and indigenous peoples' knowledge on how to utilise diverse forms and kinds of biological resources for various tasks, as well as how to protect these resources, has been identified as a valuable resource vital to humanity's future progress or even existence. Simultaneously, this valuable knowledge is preserved and flourishes in relation to conventional social and economic structures, as well as traditional community customs. These communities' sustainability and long-term development also need the protection of their rights and access to natural resources like as land, forest, and water, as well as the preservation of the environment in which they live and work. Additionally, their rights to knowledge, its application, and the results of that application must be acknowledged. theft of their resources, information, or knowledge-based goods not only

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<sup>9</sup> Understanding on the Interpretation of Article XVII of the General Agreement on Tariffs and Trade 1994, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, Legal Instruments-Results of the Uruguay Round vol. 31, 33 I. L. M. 1159 (1994)gats

<sup>10</sup> General Agreement on Trade in Services, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1B, Legal Instruments-Results of the Uruguay Round vol. 31, 33 I. L. M. 1167 (1994).

violates people's rights, but also has a negative influence on knowledge conservation and utilisation, as well as biodiversity.

The importance of protecting and preserving indigenous traditional knowledge has been acknowledged by several international documents, notably the Universal Declaration of Human Rights.<sup>11</sup> The Convention on Biological Diversity (CBD), which was established in 1992, recognised the importance of traditional knowledge in preserving species, ecosystems, and landscapes and included wording restricting access to and use of it.

### **1.5 The international Intellectual Property Agreement**

However, it became clear very quickly that implementing these provisions would necessitate the revision of international intellectual property treaties to accommodate them. The ratification of the WTO Agreement and TRIPS, which included standards for establishing and protecting intellectual property that may be regarded as opposing the CBD agreements, made this considerably more severe. As a consequence, it is vital to reconcile the various agreements in order to guarantee that traditional knowledge is maintained and conserved while simultaneously allowing for innovation and expansion across a wide range of fields.

The complexity of intellectual property protection has grown in recent decades, especially with relation to Traditional Knowledge (TK). This is primarily owing to the World Trade Organisation (WTO) Agreement, which was signed in 1995 under the aegis of the General Agreement on Tariffs and Trade (GATT). The Uruguay Round of GATT negotiations, which started in 1986, covered a number of new topics, such as Trade-Related Aspects of Intellectual Property Rights (TRIPS), Trade-Related Investment Measures (TRIMS), and the General Agreement on Trade in Services (GATS). These agreements governed the type, extent, and duration of intellectual property (IP) protection. The WTO made enforceable the preservation of TK, which refers to, the GATT Agreement, under which the indigenous and local people's knowledge, innovations, and practises that embody traditional lifestyles are critical to the protection and sustainable use of biological diversity.

People's economic, social, and cultural life, as well as their progress, have benefited from TK. The environmental crisis, the contribution of new generic technologies, manufacturing

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<sup>11</sup> Universal Declaration of Human Rights, G. A. Res. 217A (III) (1948).

techniques, and goods to the problem, as well as increasing knowledge of these issues, have all contributed to the recent growth of this. and a developing understanding that local people have a wide variety of traditional knowledge (TK), practises, and technologies that are ethical or ecologically responsible and use a variety of biological and genetic resources for food, medicine, and other purposes.

It is critical to emphasise that this rich knowledge thrives within the context of traditional social and economic activities, as well as traditional community practises. These communities' survival and long-term expansion need the protection of the protection of the environment in which people live and work, as well as their rights and access to natural resources including land, forests, and water, their rights to knowledge, knowledge use, and knowledge-derived products must be recognised.

In addition to being against people's rights, misappropriating their resources, knowledge, or products of knowledge would also have a negative impact on biodiversity and knowledge utilisation as well as preservation. These worries have caused the countries that have ratified the Convention on Biological Diversity (CBD) to urge the World Intellectual Property Organisation (WIPO) to look into the connection between intellectual property rights, biodiversity, and traditional knowledge (TK).

To address these difficulties, WIPO undertook a fact-finding mission in 1999 and established the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge, and Folklore.<sup>12</sup>

It is worth noting that traditional knowledge has always been a widely accessible asset, making it especially prone to misappropriation. International bodies such as the International Labour Organisation (ILO) and the Declaration of the Rights of Indigenous Peoples (2007)<sup>13</sup>, on the other hand, are increasingly acknowledging indigenous and local communities' collective human rights.

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<sup>12</sup> World Intellectual Property Organization, "Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore," available at <http://www.wipo.int/tk/en/igc/> (last visited May 4, 2023).

<sup>13</sup> Declaration on the Rights of Indigenous Peoples, G. A. Res. 61/295, U. N. Doc. A/RES/61/295 (2007).  
tradii=tional

## 1.6 The Rio Declaration

Indigenous and local people were recognised as different groups with specific challenges that governments must address in the Rio Declaration (1992), which was approved by the Presidents and Ministers of the majority of the world's states.

The initial concern was for these people's territorial and resource rights. The first focuses TK protection as a type of cultural legacy; the second sees TK evaluating the use of current or novel Sui generis protections as a collective human right; and the third, endorsed by the WTO and WIPO. The most essential provision in the CBD recognises the significance and the nature of collective knowledge and rights. The TRIPS Agreement, on the other hand, makes no mention of communal knowledge or rights. The inherent conflicts in the CBD and TRIPS have been the subject of considerable debate and discussion. The CBD, which recognises nations' sovereign rights over biodiversity and knowledge and allows them the power to restrict access to these resources, is built around the idea of benefit sharing. As a result, governments are able to enforce their rights under benefit-sharing agreements. However, the TRIPS Agreement lacks benefit-sharing provisions, prompting criticism that the Agreement fails to adequately address traditional communities' concerns. Some governments have enacted Sui generis TK protection measures in response to these concerns. These procedures often include the creation of a one-of-a-kind legal framework that respects the unique nature of TK as well as traditional communities' rights to govern and profit from its use.

However, putting Sui generis measures in place has been difficult, particularly in terms of TK ownership, control, and access. In response to these difficulties, in the year 2000, the World Intellectual Property Organisation created the WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge, and Folklore.

The Committee has been trying to create an international legislative framework to safeguard genetic resources, traditional cultural manifestations, and traditional knowledge (TK), with an emphasis on the concerns of traditional groups. . However, progress has been slow due to significant disagreements between developed and developing nations in terms of the proper amount of protection and the legal system. Despite these obstacles, traditional communities' rights and the value of protecting their knowledge are becoming increasingly understood. Native American tribes' rights to preserve, administer, safeguard, and advance their cultural heritage, The 2007 UN Declaration on the Rights of Indigenous Peoples recognises traditional

knowledge and traditional cultural manifestations. Genetic resources access and the equitable distribution of benefits under the Nagoya Protocol Resulting from Their Use, signed by over 130 countries in 2010, provides a framework for implementing the CBD's benefit sharing provisions. To recap, the protection of traditional knowledge and the rights of traditional communities is an important issue that requires the attention of policymakers, legal experts, and the greater international community. While there has been progress in developing legal frameworks for the protection of traditional knowledge, significant challenges remain in balancing the interests of traditional communities with those of society at large. It is vital that these issues be addressed in a manner that respects the rights of traditional communities while also acknowledging the critical role they play in conserving ecological and cultural diversity.

Traditional Knowledge (TK) on biodiversity has arisen as a key issue for many countries, especially those with a rich cultural heritage, such as India.

### **1.7 The TRIPS Agreement and its Limitations**

For patent claims involving biological resources or associated knowledge, the TRIPS Agreement, which governs intellectual property rights (IPR) at the international level, does not require the patent holder to split royalties with the state or local communities at the place of origin. . This has sparked concerns about widespread and unethical exploitation of a nation's cultural heritage, notably in India, where TK is closely tied to sectors like as forestry, medicine, agriculture, and the conservation and sustainable use of biological variation. A rising issue is the loss of essential elements of traditional knowledge, art forms, and folklore as a result of inadequate legislative protection mechanisms at the national, regional, and local levels. The current IPR processes seem to be inadequate of providing adequate TK protection. To preserve TRIPS compliance, the Indian government has made many changes to its IPR laws in recent years, including the passage of the Patent Amendment Act in 1999, 2002, and 2005. However, there are still concerns about the impact of these changes on biodiversity-related TK protection.

For India to achieve socioeconomic development, its biological variety and related Traditional Knowledge systems are seen as capital assets that must be protected and wisely used.

However, the protection of biodiversity associated with TK has raised a number of policy issues in India, including questions about the objectives and modalities of such protection, as well as the impact and implications for those who will benefit from it. These are tough issues, with

considerable differences in the definition of subject matter, purpose for protection, and methods of achieving its objectives. In Kerala, India, a state with a large stock of biodiversity linked to TK, there has been much debate on problems such as access and benefit sharing, prior informed consent, and indigenous community participation in the use of biodiversity-related TK. This debate has been fueled by the increased public awareness of biopiracy and bioprospecting. The Kani Tribes, for example, who are regarded to be the genuine caretakers of the TK linked with Arogyapacha, a traditional plant with strong therapeutic and medicinal qualities found in the state's Western Ghats, have apparently been robbed of their lawful stake in this respect. As a consequence, a critical assessment of the IP protection of biodiversity-associated TK in India, especially in Kerala, is necessary. In conclusion, many nations, including India, have serious issues with the preservation of indigenous biological knowledge.

Because of the TRIPS Agreement's prohibition on benefit-sharing with governments or local populations in countries of origin, there are worries that cultural assets would be exploited for profit. India has revised its intellectual property laws to attain TRIPS compliance, however there are still concerns about the effect of these changes on the preservation of traditional knowledge. In India, the conservation of traditional knowledge (TK) connected to biodiversity has prompted a number of policy problems, such as access and benefit sharing, prior informed permission, and indigenous community involvement. A thorough investigation of the IP protection of biodiversity-related TK is required to address these challenges.

## **1.8 Research Objectives**

1. Research TRIPS laws governing intellectual property rights and benefit sharing, and assess their effectiveness in resolving the problem of traditional knowledge and genetic resources.
2. To examine the notion of benefit sharing and its significance in the context of traditional knowledge and genetic resources, as well as the obstacles to its implementation under TRIPS.
3. To evaluate TRIPS' limits in resolving the issues connected with benefit sharing enforcement, and to research other legal and regulatory frameworks such as sui generis systems and contractual arrangements.
4. To examine the feasibility and efficacy of each conceivable solution to the issues of implementing benefit sharing.

5. To emphasise the need of working with indigenous people and other stakeholders to build legal and legislative frameworks for benefit sharing protection and enforcement, as well as the necessity for fair and effective benefit sharing systems.

## **1.9 Scope and Limitations**

Global intellectual property rights law has benefited greatly from the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). The fact that the agreement does not sufficiently address the issue of benefit sharing, especially in the context of traditional knowledge and genetic resources, is one of the accord's main complaints. As a result, TRIPS-based benefit sharing enforcement is becoming more and more necessary. As a result, this dissertation will concentrate on TRIPS and its clauses relating to benefit sharing. It seeks to investigate the efficacy of TRIPS as a tool for benefit sharing enforcement, as well as the difficulties involved with its implementation. The research will look at the significance of benefit sharing in the context of traditional knowledge and genetic resources, as well as possible remedies to the TRIPS limits.

An overview of TRIPS and its rules impacting intellectual property rights will be given at the beginning of the course. The second section of the research will focus on the idea of benefit sharing and its importance in relation to genetic resources and traditional knowledge. Traditional knowledge describes the knowledge and customs of local and indigenous cultures. Anything of plant, animal, microbial, or other origin that possesses functional units of heredity with current or prospective value is referred to as a genetic resource. The presentation will look at the problems in implementing benefit sharing and the limitations of TRIPS in overcoming these issues. One of the most serious concerns is a lack of clarity in the idea of traditional knowledge and genetic resources. As a consequence, identifying the genuine owners of these resources and ensuring that they get their fair share of benefits becomes difficult. Another concern is the lack of effective tools for benefit sharing enforcement. TRIPS preserves intellectual property rights but does not require benefit sharing. This indicates that new legal and regulatory frameworks are necessary to ensure benefit sharing is implemented. The study will look at possible solutions to these issues. One viable solution is to create unique systems for preserving traditional knowledge and genetic resources. With the help of these concepts, benefit sharing protection and enforcement would have a legal foundation. Another option is for the parties concerned in the utilisation of genetic resources and traditional knowledge to enter

into contracts. . These agreements would establish the parameters of benefit sharing and offer mechanisms for enforcing them. The paper will also look at the possibility of TRIPS as a tool for benefit sharing enforcement. The study will underline the need for new legal and regulatory frameworks to ensure that it is implemented properly. The study will emphasise the need of including indigenous people and other stakeholders in the establishment of these frameworks to guarantee equality and effectiveness. The study will also acknowledge that cultural and social ramifications may not be thoroughly explored since the research mainly focuses on legal and legislative issues. The study will be confined to traditional knowledge and genetic resources and may exclude other kinds of resources. The project will be a desk study, with no primary data gathering or fieldwork. The paper may be constrained by the availability and dependability of data and literature on the subject. Finally, this study will look into the potential of TRIPS as a tool for enforcing benefit sharing in the context of traditional knowledge and genetic resources. The study will emphasise the issues connected with its enforcement and provide viable remedies to TRIPS' shortcomings.

## **PROBLEM IDENTIFICATION**

### **2.1 Emerging Trends and Issues**

With the goal of preserving biodiversity and promoting sustainable development, the idea of benefit sharing and intellectual property rights (IPR) has gained more significance. The unsolved challenges around benefit sharing and IPR in this context may be better understood by looking at Kerala's approach to protecting traditional knowledge via IPR. The discussions for the Convention on Biological Diversity (CBD) are taking place against the backdrop of ongoing IPR challenges. These debates revealed a wide variety of opinions, including on core goals and difficulties such as the need for a new instrument, the legal foundation of the regime, its extent, processes, and consequences for noncompliance. The Access and Benefit Sharing (ABS) mechanism, which strives to guarantee the fair and equitable sharing of advantages obtained from the use of genetic resources, is one of the primary challenges that have evolved in this setting. The mutually agreed- upon terms (MAT) and prior informed consent (PIC) principles serve as the foundation for this strategy, which aim to provide countries and communities the power to select who may access and utilise their genetic resources and under what conditions. The safeguarding of traditional knowledge is significantly impacted by the ABS system, particularly for indigenous and local populations. These cultures have amassed a plethora of

information and methods for protecting biodiversity and using resources sustainably, which are often based on their traditional ways of life and cultural heritage. Thus, in order for the ABS process to function properly and benefit sharing to be promoted, Traditional Knowledge must be recognised and protected. Traditional Knowledge protection, on the other hand, creates complicated legal and policy considerations surrounding intellectual property rights. Traditional knowledge is often founded on communal and community ownership, which current intellectual property regimes do not accept. This has sparked concerns that commercialising Traditional Knowledge may end in its theft and exploitation of the communities who have developed it. In this context, Traditional Knowledge preservation demands a multifaceted approach that considers the cultural, social, economic, and environmental aspects of biodiversity protection and sustainable use. This plan must be based on the notions of benefit sharing and the recognition of the rights of indigenous and local communities. The preservation of Traditional Knowledge in the context of benefit sharing and intellectual property rights (IPR) is fascinatingly shown by Kerala, a state in southern India. Kerala has a rich biodiversity and a long legacy of traditional knowledge and practises related to biodiversity protection and sustainable usage. Traditional Knowledge preservation in Kerala has been impeded by the absence of a thorough legal and regulatory framework.

Kerala's government has made some efforts to address this issue by enacting legislation that respects local communities' right to own and manage their genetic resources. However, these initiatives have not been fully implemented, and Kerala still requires a more comprehensive approach to the protection of Traditional Knowledge. In this regard, the CBD and Trade-Related Aspects of Intellectual Property Rights (TRIPS) are crucial frameworks for safeguarding Traditional Knowledge and encouraging benefit sharing. The CBD recognises the value of traditional knowledge and promotes its preservation via legal means including intellectual property rights (IPR). Contrarily, the TRIPS Agreement fosters technology transfer to developing nations and provides a legal framework for the protection of intellectual property rights. However, putting these frameworks into action remains difficult, especially in developing countries like India. The installation of effective monitoring and compliance mechanisms, as well as the establishment of capacity-building programmes for local communities and other stakeholders, are essential for the ABS mechanism to be successfully implemented. Recapitulating, it is essential to protect Traditional Knowledge in the context of benefit-sharing and intellectual property rights in order to effectively execute the ABS mechanism and to support biodiversity conservation and sustainable use.

The Kerala case study provides unique insights into the limitations and promise of this strategy, while also emphasising its importance. Knowledge, biodiversity protection, and sustainable use are all priorities. The CBD highlights the importance of traditional knowledge in biological diversity protection and sustainable use, as well as the necessity to preserve, conserve, and maintain it.

The CBD highlights the need of preserving and promoting the use of traditional knowledge related with genetic resources in conformity with the CBD's objectives. Traditional knowledge is often linked to genetic resources. Protecting traditional knowledge, however, presents substantial difficulties and disagreements, especially when it comes to benefit-sharing and intellectual property rights (IPRs). Identifying and preserving traditional knowledge is one of the most difficult challenges. Traditional knowledge is often passed down orally and is embedded in cultural practises and beliefs. As a result, traditional IPR measures like patents, trademarks, and copyrights are difficult to identify and defend. Furthermore, indigenous and local communities frequently hold traditional knowledge collectively, making individual ownership or control difficult to establish. In response to these concerns, the CBD has established a number of procedures to safeguard and support the use of traditional knowledge related to genetic resources. One of them is the creation of an access and benefit-sharing protocol (ABS), which gives a framework for the equitable and fair distribution of benefits obtained from the use of genetic resources.

The ABS protocol tries to guarantee that the nations and individuals that donated the genetic resources get fair and adequate compensation for their use. The protocol also strives to guarantee that genetic resource suppliers provide prior informed consent (PIC) and that mutually acceptable conditions (MAT) for their usage are established.

Benefit-sharing, which is a key element of the ABS protocol, aims to ensure that the benefits obtained from the use of genetic resources are dispersed fairly and equitably. Benefit-sharing is shown through financial gains, technological transfer, capacity development, and the dissemination of research results.

The CBD has created traditional knowledge guidelines that provide guidance on the promotion and maintenance of traditional knowledge associated with genetic resources in addition to the ABS method. The suggestions place a strong focus on the need of upholding the rights of indigenous and local communities as well as the importance of traditional knowledge in the

preservation and sustainable utilisation of biological diversity. A major issue in preserving traditional knowledge is the connection between it and IPRs. It is feared that IPRs may be exploited to prevent indigenous and local populations from profiting from their traditional knowledge since traditional knowledge is often utilised in the development of new products and technology. The CBD has pushed for the recognition of indigenous and local communities' rights to their traditional knowledge as well as the adoption of appropriate safeguards to protect these rights in order to solve this issue. The CBD has also pushed for the adoption of appropriate intellectual property protection measures as well as the recognition of traditional knowledge as a kind of intellectual property.

The relationship between conventional knowledge and IPRs, on the other hand, remains contentious, particularly with regard to the question of disclosure of origin in IPR applications. The CBD has asked for the geographical origin or source of genetic material to be mentioned in IPR applications, as well as confirmation of earlier informed authorization and compliance with benefit-sharing agreements. The CBD has called for the establishment of an international rule on access and benefit-sharing and emphasises the need for more discussion and debate on these topics. In addition to addressing the complex issues concerning IPRs and benefit-sharing, the regime would provide a framework for the fair and equitable distribution of benefits resulting from the use of genetic resources and traditional knowledge.

In conclusion, safeguarding traditional knowledge associated with genetic resources is a challenging issue that poses many challenges and controversies. The ABS procedure and traditional knowledge standards are only two of the numerous strategies the CBD has developed to protect and promote the use of traditional knowledge. However, there is ongoing debate regarding the benefits of the relationship between traditional knowledge and intellectual property rights (IPRs).

## **CHAPTER IV: METHODOLOGY**

### **4.1 Introduction**

The purpose of this study is to examine if benefit sharing can be enforced via the use of TRIPS as a tool. This chapter provides an overview of the research technique that was used in this study, including the research design, data collecting and analytic procedures, hypothesis, and conclusion.

## **4.2 Research Design**

Using a qualitative research approach, this investigation. Investigating complicated problems that need for a thorough knowledge of the topic requires the use of qualitative research. In this paper, we aim to investigate the many issues surrounding benefit sharing enforcement in the context of TRIPS. For this reason, qualitative research is useful since it enables a more thorough investigation of the problem.

## **4.3 Data Collection**

The primary data collection method used in this study is a review of relevant literature. The literature review involves a comprehensive search of academic journals, books, and reports on TRIPS, benefit sharing, and traditional knowledge and genetic resources. The purpose of the literature review is to provide a broad understanding of the topic and to identify the key challenges and potential solutions associated with the enforcement of benefit sharing.

In addition to the literature review, this study also employs semi- structured interviews with key informants. Key informants are:

individuals with knowledge and expertise in the area of TRIPS, benefit sharing, and traditional knowledge and genetic resources. The purpose of the interviews is to gain a deeper understanding of the challenges associated with the enforcement of benefit sharing and to explore potential solutions to these challenges. The interviews will be conducted with individuals from various backgrounds, including policymakers, legal experts, and representatives from indigenous communities.

## **4.4 Data Analysis**

The data collected through the literature review and semi- structured interviews will be analyzed using thematic analysis. Thematic analysis is a method of analyzing qualitative data that involves identifying patterns and themes within the data. The analysis will involve coding the data and identifying common themes and patterns. The themes will then be organized into broader categories and analyzed to identify key findings.

## **4.5 Hypothesis**

1. What are the current practices and policies related to the protection and enforcement of

traditional knowledge and genetic resources?

2. How do different stakeholders, including indigenous communities, governments, and corporations, perceive the issue of benefit sharing in the context of traditional knowledge and genetic resources?
3. What are the potential impacts of the lack of enforcement of benefit sharing on indigenous communities and their cultural heritage?
4. What are the legal and policy frameworks that can be used to enforce benefit sharing in the context of traditional knowledge and genetic resources, and what are their strengths and limitations?
5. How can the development and implementation of these frameworks be made more equitable and inclusive, and what are the best practices for engaging with indigenous communities and other stakeholders in this process?

#### **4.6 Conclusion**

In conclusion, this study employs a qualitative research design to explore the viability of TRIPS as a tool for the enforcement of benefit sharing. The study employs a literature review and semi-structured interviews to collect data, which is analysed using thematic analysis. The hypothesis of the study is that TRIPS does not adequately address the issue of benefit sharing, and the study aims to identify potential solutions to these challenges.

### **CHAPTER V: RESULTS AND DISCUSSIONS**

#### **5.1 The CBD and the Nagoya Protocol: Frameworks for Fair and Equitable Benefit Sharing of Biodiversity Associated Traditional Knowledge**

One of the key issues that has arisen in relation to the protection of biodiversity associated Traditional Knowledge is benefit sharing. Benefit sharing is the sharing of benefits arising from the use of genetic resources, including Traditional Knowledge, in a fair and equitable manner between those who provide such resources and those who use them. Benefit sharing is a crucial aspect of the CBD, which recognizes the sovereign rights of states over their natural resources, and the obligation of states to ensure that the benefits arising from the use of these resources

are shared in a fair and equitable manner. Benefit sharing is particularly relevant in the context of the protection of biodiversity associated Traditional Knowledge because such knowledge is often held by indigenous and local communities who have developed it over generations. These communities are often located in developing countries where access to resources and technology is limited. The use of their knowledge by others, particularly by those in developed countries who have the resources to develop and commercialize it, can therefore result in significant benefits being generated without any corresponding benefit being shared with the communities who hold the knowledge.

To address this issue, the CBD establishes a framework for benefit sharing. Article 15 of the CBD provides that states have the sovereign right to determine access to genetic resources within their jurisdiction, and that the benefits arising from the use of these resources should be shared in a fair and equitable manner. The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization, which entered into force in 2014, provides a detailed framework for the implementation of the CBD's benefit sharing provisions. Under the Nagoya Protocol, states are required to take measures to ensure that access to genetic resources is granted only with the prior informed consent of the provider country and on mutually agreed terms. The Protocol also establishes a mechanism for the fair and equitable sharing of benefits arising from the use of genetic resources. This mechanism includes the establishment of national measures to ensure that benefits are shared in a fair and equitable manner, and the establishment of an international regime to support the implementation of these measures.

## **5.2 The Role of the TRIPS Agreement in Benefit-Sharing of Biodiversity Associated Traditional Knowledge**

The issue of benefit sharing is particularly relevant in the context of the protection of biodiversity associated Traditional Knowledge because such knowledge is often held by indigenous and local communities who have developed it over generations. These communities are often located in developing countries where access to resources and technology is limited. The use of their knowledge by others, particularly by those in developed countries who have the resources to develop and commercialize it, can therefore result in significant benefits being generated without any corresponding benefit being shared with the communities who hold the knowledge. In conclusion, the protection of biodiversity associated Traditional Knowledge is a

complex and multifaceted issue. The challenges and opportunities involved in this area are shaped by a variety of factors, including the historical trajectory of the global IP regime, the relationship between property rights and social interests, and the need for benefit sharing. Efforts to address these issues have led to the development of a range of international instruments, including the CBD and the TRIPS Agreement, as well as the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization. The effectiveness of these instruments in protecting biodiversity associated Traditional Knowledge will depend on the willingness of states to implement them in a fair and equitable manner, and on the ability of indigenous and local communities to participate in the decision-making processes that affect their knowledge and resources. The Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement has played a significant role in the benefit-sharing of biodiversity associated Traditional Knowledge (TK). The TRIPS Agreement, which came into effect on January 1, 1995, is a multilateral agreement that sets out minimum standards for the protection and enforcement of intellectual property rights (IPRs) in member countries of the World Trade Organization (WTO). The agreement aims to ensure that the intellectual property rights of inventors, creators, and other holders of intellectual property are protected, and that they are able to enjoy the fruits of their labour.

### **5.3 The TRIPS Agreement and its Implications for the Protection of Traditional Knowledge and Genetic Resources**

One of the key features of the TRIPS Agreement is the requirement for member countries to provide protection for all forms of intellectual property, including patents, trademarks, and copyrights. This protection applies to both products and processes, and covers a wide range of subject matter, including pharmaceuticals, computer software, and other forms of technology. The agreement also requires member countries to provide adequate and effective enforcement mechanisms for these intellectual property rights. The TRIPS Agreement has been particularly significant for the protection of biodiversity associated Traditional Knowledge, as it recognizes the importance of traditional knowledge in the development of new technologies and products. The agreement includes provisions for the protection of traditional knowledge and folklore, and requires member countries to take measures to prevent the misappropriation of such knowledge. It also recognizes the importance of benefit-sharing arrangements between holders of traditional knowledge and users of such knowledge, particularly in the context of the development of new products and technologies.

One of the key aspects of the TRIPS Agreement with respect to the protection of traditional knowledge is the provision for the disclosure of the origin of genetic resources and associated traditional knowledge. This provision requires users of genetic resources and traditional knowledge to disclose the country of origin of such resources and knowledge, as well as the source of the resources and knowledge. The disclosure requirement is intended to promote transparency and ensure that the benefits derived from the use of such resources and knowledge are shared fairly with the countries and communities from which they originate. Another important aspect of the TRIPS Agreement with respect to the protection of traditional knowledge is the provision for the establishment of a multilateral system for the exchange of genetic resources. This system is intended to facilitate access to genetic resources and associated traditional knowledge, while ensuring that the benefits derived from such resources and knowledge are shared fairly with the countries and communities from which they originate. The system is also intended to promote the conservation and sustainable use of biological diversity.

#### **5.4 The TRIPS Agreement and its Criticisms: Protection of Intellectual Property Rights and Traditional Knowledge, with ongoing debates and calls for reform.**

In addition to the provisions related to the protection of traditional knowledge, the TRIPS Agreement also includes provisions related to the protection of intellectual property rights in general. These provisions include the requirement for member countries to provide for the protection of patents, trademarks, and copyrights, as well as the requirement for member countries to provide adequate and effective enforcement mechanisms for these rights. The agreement also includes provisions related to the transfer of technology, which are intended to promote the development and transfer of new technologies to developing countries.

While the TRIPS Agreement has been instrumental in the protection of biodiversity associated Traditional Knowledge, it has also been the subject of criticism and controversy. Some critics argue that the agreement places too much emphasis on the protection of intellectual property rights, and that it does not provide sufficient protection for the rights of indigenous peoples and local communities. Others argue that the agreement is biased in favour of developed countries, and that it does not consider the needs and interests of developing countries. Despite these criticisms, the TRIPS Agreement remains an important instrument for the protection of intellectual property rights, including the protection of traditional knowledge. The agreement

has played a significant role in promoting the development of new technologies and products, while also ensuring that the benefits derived from such technologies and products are shared fairly with the countries and communities from which they originate. As such, the TRIPS Agreement is likely to continue to be a key point of discussion and negotiation in international trade and intellectual property law.

However, there have been ongoing debates and calls for reform of the TRIPS Agreement, particularly in relation to its impact on access to essential medicines in developing countries. The agreement has been criticized for limiting the ability of countries to produce and distribute affordable generic versions of patented medicines, thereby limiting access to life-saving treatments for many people. In response to these concerns, a number of flexibilities have been built into the TRIPS Agreement to allow for compulsory licensing of patents and other measures to promote access to medicines. Additionally, the Doha Declaration on the TRIPS Agreement and Public Health, adopted by the World Trade Organization in 2001, clarified that the TRIPS Agreement should not prevent countries from taking measures to protect public health. Despite these efforts, however, access to essential medicines remains a pressing global issue, and ongoing discussions and reforms of the TRIPS Agreement will continue to be important in addressing this and other challenges related to intellectual property rights.

## **CHAPTER VI**

### **CONCLUSION & SCOPE OF FURTHER WORK**

The protection of biodiversity associated Traditional Knowledge (TK) is a complex issue that requires a multifaceted approach. One of the key issues that has arisen in relation to the protection of TK is benefit sharing. Benefit sharing is the sharing of benefits arising from the use of genetic resources, including TK, in a fair and equitable manner between those who provide such resources and those who use them. Benefit sharing is particularly relevant in the context of the protection of biodiversity associated TK because such knowledge is often held by indigenous and local communities who have developed it over generations. These communities are often located in developing countries where access to resources and technology is limited. Efforts to address the issue of benefit sharing have led to the development of a range of international instruments, including the Convention on Biological Diversity (CBD), the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement, and the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from

their Utilization. The TRIPS Agreement has been particularly significant for the protection of biodiversity associated TK, as it recognizes the importance of traditional knowledge in the development of new technologies and products. The agreement includes provisions for the protection of traditional knowledge and folklore, and requires member countries to take measures to prevent the misappropriation of such knowledge. It also recognizes the importance of benefit-sharing arrangements between holders of traditional knowledge and users of such knowledge, particularly in the context of the development of new products and technologies. The Nagoya Protocol provides a detailed framework for the implementation of the CBD's benefit sharing provisions. Under the Protocol, states are required to take measures to ensure that access to genetic resources is granted only with the prior informed consent of the provider country and on mutually agreed terms. The Protocol also establishes a mechanism for the fair and equitable sharing of benefits arising from the use of genetic resources. This mechanism includes the establishment of national measures to ensure that benefits are shared in a fair and equitable manner, and the establishment of an international regime to support the implementation of these measures. The effectiveness of these international instruments in protecting biodiversity associated TK will depend on the willingness of states to implement them in a fair and equitable manner, and on the ability of indigenous and local communities to participate in the decision-making processes that affect their knowledge and resources. It is important to recognize the sovereign rights of states over their natural resources, as well as the obligation of states to ensure that the benefits arising from the use of these resources are shared in a fair and equitable manner. In conclusion, the protection of biodiversity associated TK requires a balanced approach that considers the interests of all stakeholders. This includes the recognition and protection of the rights of indigenous and local communities who hold such knowledge, as well as the promotion of benefit-sharing arrangements between holders of traditional knowledge and users of such knowledge. It also requires the implementation of international instruments, such as the CBD, TRIPS Agreement, and Nagoya Protocol, in a fair and equitable manner. By doing so, we can ensure that the knowledge and resources of these communities are protected and that the benefits arising from their use are shared fairly and equitably.

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