

## THE GLOBAL DIMENSIONS OF INTELLECTUAL PROPERTY RIGHTS FOR SUSTAINABLE ENVIRONMENT

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### ABSTRACT

*The biological resources and ecosystem services are not equally distributed and we all depend on these resources for our social and economic wellbeing and prosperity. But, the marginal and vulnerable groups in developing countries whose livelihood depends mainly on the biodiversity are most affected by ecosystem degradation and loss. However, these groups host and act as stewards of some of the world's most significant biodiversity and critical ecosystems. The traditionally rich knowledge bearing developing countries have to bear the cost of conserving biodiversity to benefit spatially and socio-economically remote consumers, even though they are often left with only a very small share of the benefits generated. In many cases, access and rights to land and natural resources are also being progressively transferred away from the more marginal and vulnerable groups who have traditionally managed and used them, thereby alienating them from their basic means of production, survival and security. Not only is this inequitable, but many cases these groups and countries are the least able to afford to bear either the costs of conserving biodiversity for others' benefit, or of losing the supply of goods and services that is so vital to their own economic survival and prospects for future growth. Now, the developing countries are also raising their voice in international arena and using Intellectual Property Rights to save their age old traditional knowledge. Of major concern in India is that the creation of an intellectual property rights system may threaten or undermine the rights and interests of indigenous peoples and communities. The Nagoya protocol on access and benefit sharing of genetic resources is thus supporting biodiversity conservation and equity by guaranteeing that the benefits yielded by the use of genetic resources are fairly shared between the providers, the local knowledge holders, and the users.*

**KEYWORDS:** Sustainable, Intellectual Property, Traditional Knowledge, Patent.

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### Introduction

It's a well-known fact that biopirates benefited and prospered by plundering rich natural resources of developing and underdeveloped countries. They never used to pay any royalty to the source countries in any form. With advent of globalization, there is an increase in several cases of biopiracy of traditional knowledge from India. In India, biopiracy has been observed in the plant species like *Haldi*, *Basmati*, *Neem* etc.<sup>1</sup> India is fighting at various fronts in a number of cases to get its rights back, but still, there are numerous stories of deprivation in the context of biopiracy. Today, the economic relevance of biodiversity is increasing because of the changing patterns of lifestyle, consumerism and emerging environmental problems.

With the advancement in technology, the genomics revolution has led a new road to scientific research and negatively, in the form of bioprospecting.<sup>2</sup> This is not only impacting the lives of indigenous peoples but also stealing the traditional knowledge owned by these people. Bioprospecting involves searching for, collecting and deriving genetic materials from biodiversity samples that can be used in commercialized pharmaceutical, agricultural, industrial, or chemical processing end products.

The promotion of indigenous peoples and their rights, socio-culturally, is a crucial point in the development of the country's laws regulating bioprospecting and the use of Indian genetic materials. Locals experience an increase in the cost of native resources/traditional knowledge which may be subject to exclusive-use patents owned by foreign investors.<sup>3</sup> One more area of concern is the genetic modification of the native resources, which actually, thereby make them "novel". The novelty allows for

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the patenting of once-native materials and then, Investors sell the modified version, which negatively impacts the market for products made by indigenous communities. The main point of central concern is that the cost increases either because they no longer have free and unrestricted access to the native resource as there is a price tag on what used to be free - or because they must now pay a higher price set by the patent holder ( India rejects Boehringer's AIDS Drug Patent Plea). Indirect costs cause loss of market share of farmers who harvest the native species of plant/seed and have to compete with genetically modified versions of the naturally-occurring crop. (India-U.S. fights on Basmati Rice). U.S. patents on the neem plant, turmeric, basmati rice and karela are examples of these issues.

There are three different categories of biopiracy according to Daniel F. Robinson<sup>4</sup>:

- **Patent-based Biopiracy:** The patenting of inventions based on biological natural resources and/or traditional knowledge that are extracted and exploited without adequate authorization and no benefit-sharing from other (usually developing) countries, indigenous or local communities.
- **Non-patent Biopiracy:** Other intellectual property control (through plant-variety protection or deceptive trademarks) based on biological natural resources and/or traditional knowledge that have been extracted without adequate authorization and no benefit-sharing from other (usually developing) countries, indigenous or local communities.
- **Misappropriation:** The extraction of biological resources and/or traditional knowledge without permission from other (usually developing) countries, indigenous or local communities, without adequate benefit-sharing."

Biopiracy is a new kind of crime that has recently emerged only two decades ago in which industrially developed countries dominated international conventions made the laws according to their comfortability. Biopiracy, includes the principle of proprietary intellectual property rights, community rights, national sovereignty and the common heritage of mankind. These have jointly increased the complexity of the concept of bioprospecting and biopiracy. Patent laws in India needs a wider horizon in order to be protected from being plagiarized by such global giants who are stealing our age-old Indian traditional knowledge. To prevent the theft of our unique cultural bio-diversity, construction of Traditional Knowledge Digital Library is one of an effective way for combating the problem. However, in the past few years, developing countries are raising their voice in international arena. Traditionally rich developing countries have begun to work cooperatively with each other and forming stumbling blocks to industrialized countries. This not only helps developing countries in the political bargaining with developed countries and would also help each other in solving the problem of biopiracy. Biodiversity conservation should be conditional to fair and equal access to natural resources for all. The recognition of the value of indigenous and local knowledge and practices, for instance, would contribute to a more comprehensive and efficient management of forests and watersheds. The Nagoya protocol on Access Benefit Sharing of genetic resources supports biodiversity conservation and equity by guaranteeing that the benefits yielded by the use of genetic resources are fairly shared between the providers, the local knowledge holders and the users. It contributes to empowering indigenous communities by giving them the rights to be informed and to decide about the use of natural resources on which they depend and about which they hold specific knowledge. It is well-known that traditional knowledge has the potential to earn billions.<sup>5</sup> Between 25-50 % of current prescription pharmaceuticals come from plants, either directly or through modifications by biochemical methods. Knowing this potential, pharmaceutical companies have invested millions in 'bio-prospecting,' a process by which companies dispatch researchers to search for biological source material and active compounds that can be turned into a commercial product.<sup>6</sup>

Undocumented history of our traditional knowledge makes it particularly vulnerable to bioprospectors who are in search for new products to patent. Traditional knowledge is often unrecorded in the databases regularly searched by patent application examiners. In reality, no compensation/ benefit is given to the actual inventors and products patented by strong people - a process known as "biopiracy." Biopiracy can be strongly said as the misappropriation of traditional knowledge of indigenous communities for the purpose of seeking exclusive patent ownership over the knowledge.<sup>7</sup>

The treaty agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) is a product of the World Trade Organization (WTO), an organization established by industrialized nations to promote free trade under a global trading system. The objective of TRIPS is to encourage the constant evolution of ideas by providing ample protection to intellectual property rights owners and rewarding their innovativeness and ingenuity. The TRIPS agreement is recognized as an "impressive" document for its "comprehensive scope and coverage," leading some to recognize it as the "most

important multilateral instrument in this field. "Unlike the Paris Convention, the TRIPS agreement created uniform patent standards, which is considered one of its most significant improvements over the Paris model. Additionally, as part of the WTO, the TRIPS agreement is tailored to the needs of industrialized nations which puts pressure on developing countries that wish to conduct trade with these nations to conform to TRIP. Traditional knowledge holders face various barriers under current international patent regimes like:

- **Evidentiary Barriers:** The evidentiary issues posed by current patent law constitute traditional knowledge's primary external barrier. It arises during the application process for a patent in attempting to pinpoint the date the knowledge originated. If a traditional knowledge holder does not know when the key breakthrough occurred in developing the knowledge, it would not qualify for patent protection. Since, traditional knowledge develops over generations, no one date can be said as the "original date of invention. Traditional knowledge is typically undocumented, thus it fails to be recognized as "prior art" to prevent another party from patenting the same knowledge."
- **Substantive Barriers:** Inventiveness is currently treated as an "isolated, individualized achievement of an identifiable inventor," compared to traditional knowledge which is often collectively owned by a community and produced by natives of a specific region. Consequently, identifying individual inventors may be contradictory to community norms and may lead to conflict among community members.
- **Cultural Barriers:** It constituted the internal values and beliefs of each community. Some cultures are known to believe that they are the temporary keepers of nature's inventions which have evolved over millions of years.

#### Conclusion

The protection of traditional knowledge is vital to underdeveloped countries. Traditional knowledge is one of the few resources and bargaining chips these countries still retain. Accordingly, Mexico and other underdeveloped countries should protect themselves from the misappropriation of traditional knowledge that has already begun. Adopting domestic legislation provides the best means to regulate and control foreign entities seeking to extract and exploit traditional knowledge from vulnerable indigenous communities. The major concern in India is that the present mode of intellectual property rights system that may threaten or undermine the rights and interests of indigenous peoples and communities. The existence of intellectual property rights laws do not necessarily ensure that the indigenous communities will receive the benefits for being "natural resource managers" or developing and adapting the traditional knowledge "from experience over the centuries." This has led to bio-piracy, which "relates to industrial patents that exploit indigenous biodiversity and traditional knowledge for the profit of (often foreign) companies without recognizing or compensating the source community." For biodiversity conservation, feasible internal patent laws to be made which is in favour of natural resource managers.

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