

BIODIVERSITY & INTELLECTUAL PROPERTY RIGHT

Dr. Vishal Mehta¹, Ms. Vidhi Paryani²

¹Principal College of Professional Studies-ATC

²Assistant Professor, Dept. of Commerce St. Paul Institute of Professional Studies, Indore

Abstract - Biological diversity is the symbol of existence on this planet and the pillar of sustainable growth. The existing Intellectual Property Rights (IPR) system is promising commercialization of seed improvement, monoculture, for tification of new plant diversities, microbes, and naturally reformed organisms. As a result, our ironic biogenetic diversity is being windswept irrevocably. We must discovery a pathway to make a different and unusual approach that will get stability between formal Intellectual Property (IP) system and sustainable phases of biodiversity.

Biodiversity is the foundation of sustainable growth. The urbanized countries are not opulent in biogenetic properties but are well equipped in research and development. They use the biogenetic properties retrieved from the developing countries. As a result, there is a commencement of the vulnerable flow of genetic information from the developing countries to the capital-rich west, and a protected flow in the opposite direction mainly through patents and Plant Breeders' Rights (PBR). It has both visible and unseen bearings. Genetic erosion is one of the most important invisible effects that is in long run demonstrated visibly with the loss and damage of biodiversity. The advent of new biotechnologies and the ability to classify and include exotic genetic material into marketable products has forced the pace of change in the industry and in Intellectual Property (IP) systems. Widespread commercial misuse of genetic diversity catalysed by research and development for obtaining IPR will decide the future of our rich biodiversity.

Keywords: Biodiversity, IPR, BD Act, Provisions, Consequence.

1 INTRODUCTION

The object of India's Biodiversity Act 2002 (here denoted to as 'the BD Act') is to preserve the rich biodiversity of the nation. The act was implemented in 2003 under the patronages and support of the National Biodiversity Authority (NBA). According to the BD Act, NBA is accountable for Access and Benefit Sharing (ABS), consent for access to and allocation of biological resources, results or knowledge of systematic research to distant citizens, companies or non-resident Indians and numerous other stuffs related to preservation of India's biodiversity. The Act insists upon proper value sharing under commonly agreed terms linked to access and handover of biological resources or knowledge stirring in or obtained from India for various tenacities or purpose.

Biological Diversity Act, 2002 of India has well-defined various jargons. "Biological Diversity" means the variability among alive creatures from all sources and the biological complexes of which they are part and comprises diversity within species or amongst species and of eco-systems [chapter I Clause 2b]. 1 "Biological resources" includes plants, animals and microorganisms or parts thereof, their genetic material and by -products with definite or possible use or value but does not comprise human genetic material [Chapter I Clause 2c]. 1 Intellectual Property Rights (IPR), as the term advocates, are meant to be rights or privileges to thoughts, ideas and information, which are helpful in new inventions or processes. These privileges enable the holder to eliminate imitators from publicizing such inventions or procedures for definite period of time; in turn the holder is required to reveal the formula or idea behind the product/process. The result of IPR is therefore monopoly over commercial exploitation of the idea /information, for a limited and specified period of time. The specified purpose of IPRs is to stimulate inventions, by offering higher economic returns than the market otherwise might offer.

2 HISTORY OF IPR AND BIODIVERSITY

The early phase towards creating biodiversity a commodity developed from the United Kingdom wanting to use excellent quality seeds for agricultural production. This gradually led to the Companies marketing registered seeds. Further the government rewarded individuals who improved seeds. This directed to the development of Breeders' Rights that transformed more commercialized and very soon limiting. For above 60 years, diverse

forms of protection of new plant diversities through arrangement of PBR have in existence in developed countries. In 1961, a “Union International Pour la Protection Des Obtentions Vegetales” (UPOV-International Union for the Protection of New Varieties of Plants) was recognized in Geneva for organising the in tercountry application of PBR. Though the Agreement or pact was signed in Paris in 1961, it came into application only in 1968. It was amended in Geneva in 1972, 1978, and 1991. The 1978 Act came into effect in 1981. To be entitled for protection or guard, the varieties have to be:

- Different from the prevailing, commonly known varieties
- Adequately homogenous /uniform
- Stable or constant and
- Novel in the sense that they must not have been commercialized previous to certain dates established by reference to the date of submission for protection.

Biodiversity is important as:

- Diversity is the greatest ecologically sustained form.
- Diversified crops preserve and uphold soil fertility.
- Diversity enhances soil supervision in rain fed belts.
- Diversity means assurance and protection against crop failure.
- Diversity augments labour accessibility.
- Diversity safeguards food safety.
- Diversity of variety of foods confirms nutritional stability.
- Diversity offers a range of fodder to the cattle keeping them well and productive.
- Diversity aids and supports women in controlling their farm economics and seeds.

Biodiversity India is categorized amongst the 12 mega-diversity centres of the world. India's record in agro-biodiversity is likewise remarkable. There are 167 yield species and 320 kinds of wild crop families and several species of tame animals. India is known to be the centre of origin of 50,000 variations of rice, 1000 diversities of mango, 100 varieties of pepper, 27 strains of cattle, 22 breeds of goat, 40 types of sheep, 18 kinds of poultry, 8 varieties of buffalo (the world's total biodiversity) and numerous other varieties of pigeon-pea, turmeric, ginger, sugarcane, gooseberries etc and grades seventh in terms of contribution to world agriculture. India has anironic and diverse legacy of biodiversity. It has 850 species of bacteria, 6500 kinds of algae, 14500 types of fungi, 2000 classes of lichen, 2850 species of bryophytes, 1100 sort of pteridophytes, 64 species of gymnosperms and 17500 species of angiosperms.

2.1 The BD Act and What it Articulates

Section 6 (1) of the Biological Diversity Act, 2002 "No individual shall apply for any intellectual property right, by whatever name called, in or outside India for any invention based on any research or information on a biological resource obtained from India without obtaining the previous approval of National Biodiversity Authority before making such application; provided that, if a person applies for a patent, permission of the National Biodiversity Authority may be obtained after the acceptance of the patent but before the sealing of the patent by the patent authority concerned; provided further that the National Biodiversity Authority shall dispose of the application for permission made to it within a period of ninety days from the date of receipt thereof."

2.2 Biodiversity associated provisions from The Indian Patents Act 1970 and Rules 2003:

A per Section 10 (4) (d) (ii) of the Patents Act, 1970, the patent applicant should reveal the source and terrestrial origin of the biological material when used in an origination. Such a disclosure can be incorporated in the beginning of the specification.

Form 1 Declaration Requirement The Indian Patent Rules 2003, in order to counterpart with the BD Act 2002, entails the applicant of a patent to submit a declaration under Form-1 titled Application for Grant of Patent of the Patent Rules 2003 to the conclusion that "the discovery as revealed in the specification, uses the biological solid from

India and the essential permission from the Competent Authority shall be submitted by me/us before the grant of patent to me/us".

NBA could, while granting approval or authorisation, impose benefit sharing fees or royalty for commercialization of any rights ascending out of the biological possessions acquired from India.

Subsequently, the guidelines make it mandatory for the candidate to obtain approval from NBA for a patent to be permitted. Hence, the supervisor can raise an opposition in the examination report if the authorization from NBA is not obtained or submitted. Even if the objection was not upraised throughout the examination stage, the same could be raised at a later phase.

In case the patent request notes a biological resource which is not invented or patterned in India, then an endorsement from NBA is not essential. In such cases, even if any complaint is raised during examination, the applicant can overcome the same by stating that the biological resource mentioned in the invention is not of Indian origin and shall submit a declaration as well subsidiary the same. It is to be noted that in such cases the description of the patent application should be revised by way of incorporation of a distinct heading/paragraph at the beginning of the description that the biological material used in the invention is not from India and should clearly specify the source country and geographical origin of the same.

2.3 Penalties imposed in case of Breach of the BD Act

In Section 55(1) of the BD Act 2002, "whoever flouts or attempts to flout or helps in the breaking of the provisions of the section 3 or section 4 or section 6 shall be punishable with custody for a term which may lengthen to five years, or with fine which may extend to ten lakh rupees and where the damage or destruction caused exceeds ten lakh rupees such fine may be proportionate with the damage caused, or with both."

2.4 Penalties for the Violation of Biodiversity

Provisions under Indian Patents Act 1970 Breaking of provisions related to biodiversity provisions under Indian Patents Act 1970, will lead to denial of patent under Section 15. In case of disapproval under clauses (d), (f) and (k) of section 25(1) and in case of post-grant opposition approved patents shall still be cancelled or invalidated under clauses (d), (f) and (k) of section 25(2) of the Patents Act 1970.

If the whole description does not reveal or incorrectly mention the source and geographical origin of biological material used for the discovery, then as per clause (j) of Sections 25(1) and 25(2) respectively of the Patents Act, 1970, such situation forms a ground for both pre-grant and post-grant resistance, respectively.

2.5 Post-Grant Opposition of NBA Vs Sunev Pharma Solutions Ltd

On August 27, 2019, the secretary of NBA, trailed post-grant opposition against Sunev Pharma Solutions for having acquired patent on origination of bio-resources viz. *Azadirachta indica*, *Berberis aristata* or *Berberis vulgaris*, *Glycyrrhiza glabra*, *Jasminum officinale*, *Picrorhiza kurroa*, *Pongamia pinnata*, *Rubia cordifolia*, *Saussurea lappa*, *Terminalia chebula*, *Capsicum abbreviata*, *Nymphaea lotus*, *Curcuma longa*; *Tricosanthes dioica*, *Symplocos racemose*, *Ichnocarpus frutescens*, *Sesamum indicum* oil, *Ricinus communis* oil, *Cocos nucifera* oil, *Brassica juncea* oil.

Violation of Section 6 of the BD Act 2002

"On inspection it was acknowledged by NBA that patents for the identical origination were granted in places like Europe, South Africa, United States of America, South Korea, and Mexico without former approval or consent of the NBA. Successively a patent was approved by the Indian Patent Office on October 10, 2018, with the patent number 302105. The complaint was raised in the FER concerning the submission of approval from NBA, for which the applicant on October 10, 2015 responded that they have applied for NBA endorsement. Subsequently the applicant edited their response on January 14, 2018, stating that all the biological resources were introduced from China except *Sesamum indicum* oil, *Ricinus communis* oil, *Cocos nucifera* oil, *Brassica juncea* oil which were obtained from India and are exempted from authorization of NBA as they are reported as Normally Traded Commodities in the NBA notification dated April 07, 2016. Based on the

evidence provided by the applicant, patent was granted on October 10, 2018 with the patent number 302105."

The above detailed case is a classic illustration of unlawful disclosure of the geographical basis and origin of biological resource. It will be stimulating to see the move of the Indian Patent Office in this circumstance as it has further evidently stated that any false or incorrect declaration on behalf of the claimant makes him liable for cancellation of patent under section 64 (1) (j)/ 64(1) (p) of the Patents Act 1970 (as amended).

Originations that do not relate to 'Biological Resource' defined under the BD Act, 2002

In opinion of the current submissions made by the shareholders with respects to the IPO verdicts for the patent applications concerning the use of biological materials not sourced or invented in India as well as the discoveries that narrate to material that does not come under the definition and description of 'Biological Resources' under the BD Act, 2002, the IPO has issued guiding principle which have streamlined the following:

3 VALUE ADDED PRODUCT

Section 2 of Biological Diversity Act 2002 unambiguously excludes value added products from the purview of "Biological resources". **Section 2 (p) - "value added products"** means produces which may comprise portions or abstracts of plants and animals in unrecognizable and tangibly inseparable form.

For example, if a development is based on Tulsi plant itself, the patent claimant would need approval from NBA; whereas if an innovation is based on the extract acquired from Tulsi plant, then no approval from NBA is required.

3.1 Bio-Wastes

Bio-wastes are commonly produced after the economic use of the biological resource is exhausted. In case of innovations that develop bio-wastes no approval from NBA is required.

3.2 Synthetically Prepared Biological Material

NBA consent is not required for inventions which are based on synthetically and unnaturally prepared material like enzymes, pigments, gums, sucrose etc., which may be formed from a biological resource.

BIBLIOGRAPHY

1. Anuradha, R.V. 1999. Between the CBD and the TRIPs: IPRs and What It Means for Local and Indigenous Communities. Paper presented at Workshop on Biodiversity Conservation and Intellectual Property Regime, RIS/Kalpavriksh/IUCN, New Delhi, 29-31 January, 1999.
2. Dhar, B. and Chaturvedi, S. 1999. Implications of the Regime of Intellectual Property Protection for Biodiversity: A Developing Country Perspective. Paper presented at Workshop on Biodiversity Conservation and Intellectual Property Regime, RIS/Kalpavriksh/IUCN, New Delhi, 29-31 January, 1999.