

ANALYSIS OF BIODIVERSITY ACT AND ITS IMPACT ON IPR

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ABSTRACT: *Biodiversity is the cornerstone of life on earth. Sustainable development is very much the backbone. The current Intellectual Property Rights regime focuses on encouraging promotion of seed growth and development, monoculture protection of new varieties, protection of plant varieties, micro-organisms, and genetically modified organisms. As a result, our rich biogenetic diversity is eroding. We need to find a way to create an alternative approach that will balance the formal system of Intellectual Property with sustainable biodiversity.*

Keywords: *Biodiversity, Intellectual Property Rights, Sustainable development, Microorganism.*

INTRODUCTION

The essential element of life is biodiversity. Generally speaking, developing nations are not rich in biogenetic capital, but are well prepared for growth and science. People utilise and leverage the biogenetic assets of developing countries. As a consequence, through numerous patents and Plant Breeders' Rights (PBR) safeguards, there is an unregulated movement of genetic material from developing countries to developed countries, and a safe flow in the opposite way. The Convention on Biological Diversity (CBD, 1992), among the several issues involved, Intellectual property rights (IPRs) relationships, especially as part of the IPR Agreement, Trade-related aspects of intellectual property rights (TRIPs) and biodiversity, particularly in the field of biodiversity, Access to genetic capital and the sharing of benefits (ABS) and conventional knowledge (TK), Arguably, they have been the most constant, divisive, growing, imaginative, profitable and over the previous few years, interesting.

From the United Kingdom wanting to use high-quality seeds for agricultural production, the original move towards making biodiversity a commodity evolved. This eventually contributed to the sale of registered seeds by businesses. The government later rewarded individuals who further developed the seeds. This caused the rise of Breeders' Rights, which became more commercialised and restrictive quite quickly.

Different ways of protection for new plant varieties have been around for over 60 years.

In developed countries, there is a PBR system. The "Union Internationale Pour la Protection Des Obtentions Vegetales" (UPOV-International Union for the Protection of New Varieties) was founded in 1961. It was founded in Geneva to coordinate the implementation of the PBR between countries. Although the Convention was agreed in 1961 in Paris, it only entered into force in 1968. In 1972, 1978, and 1991, it was revamped in Geneva. In 1981, the Act of 1978 came into force. For species to be eligible for protection, they must be:

- Distinct from the existing, commonly known varieties
- Sufficiently homogeneous/ uniform

- Stable and

New in the sense that they must not have been commercialised prior to certain dates established by reference to the date of application for protection. In comparison, patents with maximum limitations are also available in many countries for glyphosate (GMOs) and genetically modified crops (GMOs). Among microorganisms. The monetizing of genetically modified bacterial strains produced by renowned microbiologist Dr. Anadamohan Chakrabarty began in the USA in 1972.

DISCUSSION

History of IPR and biodiversity

The ability to make biodiversity an asset originated from the UK trying to use greater tools for agricultural production. That linked to something similar to the selling by businesses of registered seeds. Later, the government also started to understand that the efficiency of seeds had improved. This would have been the reason for the Breeders' Rights emergence, which eventually became far more commoditized and nationalist. Various types of protection for plant varieties have been given over most of the years by various laws and systems, so it has eventually been decided that varieties have to be unique, sufficiently homogeneous/uniform, from both the existing widely known varieties to be exempt. Stable and fresh mostly in sense whereby they cannot even be introduced on the market until those dates have already been defined by reference to either the date of the user authentication or the date of both the security application.¹

In addition, in many countries, patents containing full limits on biotechnology (GMOs) and micro-organisms are therefore available. The patenting to genetic engineering influenza viruses started in 1972 in the United States, conceived by esteemed microbiologist Dr. Anadamohan Chakrabarty. It has observable as well as invisible impacts. The mining of genetic material are among the most serious yet implicit shifts that will be noticeable in the long run, mainly due to biodiversity extinction.

Biodiversity plays a very important role as some of the most sustainable form of biodiversity in society. Leveraged crops maintain soil productivity, optimise soil management in rain-fed belts, insure about crop failure and optimise labour availability, ensure food security and allow women to control their farming and seed industries.

The creation of new biotechnologies and indeed the ability to identify and incorporate exotic genetic information throughout consumer products have forced the industry to change its trajectory, but rather to revise the frameworks of intellectual property. The wide industrial use of genetic resources amongst researchers towards receive an IPR will decide the future of the rich biodiversity.

India is categorised being one of the world's mega-diversity centres. India's agricultural biodiversity record is equally remarkable. More than 167 species of crops and 320 species of families of wild crops and many species of domesticated animals occur.²

¹ Biodiversity Act, 2002, No. 93 of 2002 (Ministry of Environment and Forests, Government of India, New Delhi) 2002

² Kothari A, India's mega diversity, Folio: Earthscapes (The Hindu), May (20) 2001, 25.

Legislations

In order to comply with the Trade Related Intellectual Property Rights and convention on Biological Diversity India the extended the duration of the term of patent to 20 years for all product and process patents and microorganisms will be patentable subject in India. The deposit of biological materials should be in compliance with the Budapest Treaty. India is known to just be the centre of origin of 50,000 varieties of rice, 1000 varieties with mango, 100 varieties of pepper, 27 varieties of cattle, 22 varieties of goats, 40 varieties of sheep, 18 varieties of poultry, 8 varieties of pigeon-pea, turmeric, ginger, sugarcane, gooseberry, etc. There is a rich and diverse legacy of biodiversity in India. There are 850 bacterial species, 6500 algae species, 14500 fungal species, 2000 lichen species, 2850 bryophyte species, 1100 pteridophyte species, 64 gymnosperm species, and 17500 angiosperm mammals.

"In India, patent acts play a vital role in ensuring Indian biodiversity by the important provisions what protect it, Section 3 of the Indian Patent Act discusses non-patentable inventions and Section 3(b) in specific talks on "an innovation of primary or intended use though commercial exploitation that may be contrary to public order or to commercialisation. and 3(j) "plants and animals in whole or in part other than micro-organisms, including seeds, varieties and species, and essentially biological processes for the production or propagation of plants and animals"; and 3(j) "plants and animals in whole or in part other than micro-organisms, including seeds, varieties and species." In particular, no hacker can gain monopoly rights over an invention relating to the aforementioned subject matter.²

"On the other hand, the Indian Biodiversity Act discusses biodiversity and also defines biological diversity as "an invention of primary or intended use or commercial exploitation that could be contrary to public order or morality or cause serious harm to human, animal or plant life or health or the environment," biological resources as "plants, animals and micro-organisations "Section 6 of the Acts provides that "No person shall apply to any inventor for any intellectual property right, by whatever name, in or outside India, by any inventor for any intellectual property right, by whatever name.

Impacts of Intellectual Property Rights

Providing an estimation of the effect of Intellectual Property Rights on biodiversity is obviously a challenging job. In the long run, the advantages associated with genetic variation are. Humanity shares a common bowl containing only 20 crops grown to meet 90 percent of our demand. In developing countries, all 20 crops are developed that are all highly vulnerable to pathogens and rely on genetic diversity in their economic existence. During this troubling point, most individuals assume that a large proportion of our food plants' genetic diversity, and used to be available in the country, has become extinct. A critical global issue is the protection and growth of the remaining crop diversity. They also sow different and more commercially viable seeds while farmers are looking to increase their sales. Also different government structures are often required to adapt unique seeds or new varieties of plants to them. Commercial agriculture, therefore, appears to increase genetic uniformity, contributing to genetic erosion in turn. Commercial agriculture that accelerates genetic degradation is promoted by the Intellectual Property system. The area of research in biotechnology also focuses on viable seeds

for commercial agriculture and contributes to demand for the defence of intellectual property with the same potentially negative implications for genetic diversity.³

The requirements for granting a certificate for Plant Variety Protection include lower thresholds than the standards needed for patents. There are criteria for distinctness and novelty, but no industrial application or innovative phase or utility is equal. Thus, the laws for the conservation of plant varieties allow breeders to protect plant varieties with very similar characteristics, meaning that the scheme appears to be regulated by commercial considerations of product differentiation and expected obsolescence, and instead genuine changes in agricultural characteristics. Similarly, the criteria for consistency under different systems exempt local, more genetically diversified and less established varieties produced by farmers. These features, however, are also those who make devices more acceptable and able to adapt to the agro-ecological conditions during which the vast majority of farmers live. The standards for uniformity are another significant consideration. Although proponents argue that even by increasing the production of new varieties, Plant Variety Conservation actually increases biodiversity, but would actually contribute to the uniformity of crops and loss of biodiversity by requiring classification and uniformity of similar varieties of crops. In addition, similar issues have arisen with regard to greater uniformity resulting from the success including its varieties including its Green Revolution, contributing to greater susceptibility to disease and biodiversity loss. Furthermore, the privatisation and commercialization of engineered and proprietary genetic tools is accelerating the trend towards mono-cultural cropping. In addition, an engineered organism may, in its different world, produce unknown harmful effects on other organisms that may exacerbate increased erosion and ecological degradation. Neurologically advanced seeds require increased use of pesticides and fertilisers, which contributes enormously to the loss of biodiversity and seems to have a direct impact on the flora, fauna and microbial population. In addition, payments to developing countries and foreign seed firms would raise the debt burden, which, if we accept debt repayments such as exports of natural resources, may further exacerbate environmental and social disturbances.

The successful production of biological diversity would rely on the relationship between two opposite poles, the formal society and creative structures, which can still be nurtured. Policymakers need to incorporate modernization in order for this to succeed, with a clear inclination to take active participatory methods of analysis and extension. Active involvement means the exercise by farmers and rural people of practical power and influence over genetic resources, whereby the formal system should reciprocate with our science, experimentation, technological, organisational and organisational resources. Policy shifts from time to time to meet our international commitments and ensuring biodiversity conservation at the same time. In the research, enhancing the quality of human life is the justification for preserving our genetic diversity and encouraging ingenuity from these biogenetic resources, and this should only be kept in mind before another technological or policy changes, else our very existence will be at risk.⁴

CONCLUSION

It is well even said the successful growth of biological diversity would rely on the balancing between the rights of intellectual property and the diversity of biology. As both fields

³ The Crucible Group, Plants-People, Plants and Patents (IDRC, Canada) 1994,2.

⁴ .Kothari A, India's mega diversity, Folio: Earthscapes (The Hindu), May (20) 2001,25.

concentrate on a different version, intellectual property rights are also more dependent on monopoly rights, and access to nature on the other hand is a collective right which cannot be monopolised. We need to concentrate more on the issues that are increasing because of it and try to find the answer in order to preserve the consistency in order to improve these three sides.