INTERNATIONAL JOURNAL FOR LEGAL RESEARCH AND ANALYSIS

Open Access, Refereed JournalMulti Disciplinary
Peer Reviewed Edition :

www.ijlra.com

 ISSN: 2582-6433

DISCLAIMER

 ISSN: 2582-6433

EDITORIAL TEAM

EDITORS

Megha Middha

Megha Middha, Assistant Professor of Law in Mody University of Science and Technology, Lakshmangarh, Sikar

Megha Middha, is working as an Assistant Professor of Law in Mody University of Science and Technology, Lakshmangarh, Sikar (Rajasthan). She has an experience in the teaching of almost 3 years. She has completed her graduation in BBA LL.B (H) from Amity University, Rajasthan (Gold Medalist) and did her post-graduation (LL.M in Business Laws) from NLSIU, Bengaluru. Currently, she is enrolled in a Ph.D. course in the Department of Law at Mohanlal Sukhadia University, Udaipur (Rajasthan). She wishes to excel in academics and research and contribute as much as she can to society. Through her interactions with the students, she tries to inculcate a sense of deep thinking power in her students and enlighten and guide them to the fact how they can bring a change to the society

Dr. Samrat Datta

Dr. Samrat Datta Seedling School of Law and Governance, Jaipur National University, Jaipur. Dr. Samrat Datta is currently associated with Seedling School of Law and Governance, Jaipur National University, Jaipur. Dr. Datta has completed his graduation i.e., B.A.LL.B. from Law College Dehradun, Hemvati Nandan Bahuguna Garhwal University, Srinagar, Uttarakhand. He is an alumnus of KIIT University, Bhubaneswar where he pursued his post-graduation (LL.M.) in Criminal Law and subsequently completed his Ph.D. in Police Law and Information Technology from the Pacific Academy of Higher Education and Research University, Udaipur in 2020. His area of interest and research is Criminal and Police Law. Dr. Datta has a teaching experience of 7 years in various law schools across North India and has held administrative positions like Academic Coordinator, Centre Superintendent for Examinations, Deputy Controller of Examinations, Member of the Proctorial Board

 ISSN: 2582-6433

Dr. Namita Jain

Head & Associate Professor

School of Law, JECRC University, Jaipur Ph.D. (Commercial Law) LL.M., UGC -NET Post Graduation Diploma in Taxation law and Practice, Bachelor of Commerce.

Teaching Experience: 12 years, AWARDS AND RECOGNITION of Dr. Namita Jain are - ICF Global Excellence Award 2020 in the category of educationalist by I Can Foundation, India.India Women Empowerment Award in the category of "Emerging Excellence in Academics by Prime Time & Utkrisht Bharat Foundation, New Delhi.(2020). Conferred in FL Book of Top 21 Record Holders in the category of education by Fashion Lifestyle Magazine, New Delhi. (2020).Certificate of Appreciation for organizing and managing the Professional Development Training Program on IPR in Collaboration with Trade Innovations Services, Jaipur on March 14th, 2019

Mrs.S.Kalpana

Assistant professor of Law

Mrs.S.Kalpana, presently Assistant professor of Law, VelTech Rangarajan Dr. Sagunthala R & D Institute of Science and Technology, Avadi.Formerly Assistant professor of Law,Vels University in the year 2019 to 2020, Worked as Guest Faculty, Chennai Dr.Ambedkar Law College, Pudupakkam. Published one book. Published 8Articles in various reputed Law Journals. Conducted 1Moot court competition and participated in nearly 80 National and International seminars and webinars conducted on various subjects of Law. Did ML in Criminal Law and Criminal Justice Administration.10 paper presentations in various National and International seminars. Attended more than 10 FDP programs. Ph.D. in Law pursuing.

Avinash Kumar

Avinash Kumar has completed his Ph.D. in International Investment Law from the Dept. of Law & Governance, Central University of South Bihar. His research work is on "International Investment Agreement and State's right to regulate Foreign Investment." He qualified UGC-NET and has been selected for the prestigious ICSSR Doctoral Fellowship.He is an alumnus of the Faculty of Law, University of Delhi. Formerly he has been elected as Students Union President of Law Centre-1, University of Delhi.Moreover, he completed his LL.M. from the University of Delhi (2014-16), dissertation on "Cross-border Merger & Acquisition"; LL.B. from the University of Delhi (2011-14), and B.A. (Hons.) from Maharaja Agrasen College, University of Delhi. He has also obtained P.G. Diploma in IPR from the Indian Society of International Law, New Delhi.He has qualified UGC – NET examination and has been awarded ICSSR – Doctoral Fellowship. He has published six-plus articles and presented 9 plus papers in national and international seminars/conferences. He participated in several workshops on research methodology and teaching and learning.

 ISSN: 2582-6433

ABOUT US

INTERNATIONAL JOURNAL FOR LEGAL RESEARCH & ANLAYSIS ISSN

2582-6433 is an Online Journal is Monthly, Peer Review, Academic Journal, Published online, that seeks to provide an interactive platform for the publication of Short Articles, Long Articles, Book Review, Case Comments, Research Papers, Essay in the field of Law & Multidisciplinary issue. Our aim is to upgrade the level of interaction and discourse about contemporary issues of law. We are eager to become a highly cited academic publication, through quality contributions from students, academics, professionals from the industry, the bar and the bench. INTERNATIONAL JOURNAL FOR LEGAL RESEARCH & ANALYSIS ISSN 2582-6433 welcomes contributions from all legal branches, as long as the work is original, unpublished and is in consonance with the submission guidelines.

 ISSN: 2582-6433

PLANT PROTECTION BOON OR BANE

AUTHORED BY - SIDDHARTH BHATTACHARYYA

It was Friedrich Nietzsche who had famously said, "Everyone who enjoys thinks that the principal thing to the tree is the fruit, but in point of fact, the principal thing to it is the seed. Herein lies the difference between them that create and those that enjoy."
The purpose of this article is to outline the rights and benefits that Indian farmers have with regard to their creative plant varieties and the ways in which they can safeguard their intellectual property under the UPOV Act.

India has a long history of agriculture, using traditional farming techniques. Farmers have long been the foundation of the country's agricultural system. We frequently hear about and witness farmers from the village's interior developing new plant and fruit kinds, or they may even preserve some of their older varieties that are unknown to outsiders.

What we are unaware of, though, is that these plant varieties can also be considered the intellectual property of a single farmer or a community. As such, they can be protected by IP law, giving them the exclusive right to use both new and old varieties for a set amount of time.

India is a signatory to the TRIPS Agreement, and in 2001 it adopted the Protection of Plant Variety and Farmers Rights Act (UPOV) in order to comply with Article 27(3)(b) of the agreement. The primary goals of the act were to:

1. safeguard the rights of farmers engaged in the breeding of new plant varieties;
2. preserve wild species or traditional varieties; and
3. enhance the value of such wild species or traditional varieties by selecting and identifying their valuable attributes.

Benefits and rights granted to farmers under the UPOV Act

Farmers and the community who engage in the development and breeding of new or expanded plant varieties, as well as the preservation and protection of historic plant varieties, are granted certain specific rights and advantages under the UPOV legislation. We must first comprehend how and why these rights were created in order to comprehend these rights and their advantages.

 ISSN: 2582-6433

Members of the local communities that are involved in maintaining the variety and incorporating it into their daily lives are aware of the numerous health and therapeutic advantages that many new, traditional varieties and wild races in our nation offer. However, the issue of bioprospecting began to surface as a result of globalization and communities' increased exposure to the outside world. This led to researchers and corporate institutions misusing the knowledge of the farmers and the community for their own gain and excluding them from any form of profit sharing or royalties.

In order to protect the rights of farmers and the community, prevent the theft of plant origins, and ensure that farmers receive a just reward for their efforts, the government created a class of land known as **Farmers Variety**. This class gives farmers the ability to commercially exploit their innovation and traditionally preserved variety while also granting them the right to protect their innovation.

A plant variety **must pass all four of the requirements** listed below in order for a farmer to be eligible to protect it under the UPOV Act:

- Novel
- Distinctiveness: A variety is considered distinct if it possesses even a single crucial feature that sets it apart from other recognized varieties that are currently in use around the globe.
- Uniformity: A variety is considered uniform if, even after continuous propagation, it exhibits a significant degree of uniformity in its key characteristics.
- Stability: Something is deemed stable when its fundamental characteristics hold true even after repeated propagation

According to the UPOV statute, farmers are entitled to the following benefits and rights:

1) The ability to file for their new variety.
2) Gain recognition and benefits for protecting wild diversity.
3) Farmers will receive payments in the event that an EDV malfunctions.

   A new plant variety that is derived from an initial variety is known as an Essentially Derived Variety (EDV), and it can be identified from the initial variety by having some of its basic traits, but it also has some new qualities of its own. If someone is interested in deriving or using an EDV that was generated with the assistance of farmer variety, they must obtain permission from the farmers or the community involved in the production, preservation, and development of that variety

 ISSN: 2582-6433

4) The right to receive payment for your contributions.

   The villagers in India have the right to a share of the profits made from the commercial exploitation of a plant variety that has been registered under this act if they are farmers, a community, an organization of farmers, or a village and they have significantly contributed to the development of the plant variety's evolution.

The legislature has enacted a number of legislation to safeguard farmers' rights and encourage increased plant variety preservation, innovation, and breeding. Additionally, efforts are undertaken to ensure that farmers who have contributed to the development of a new variety receive a fair share and to shield farmers from the abuse of large corporations or research institutes. As most farmers in the nation lack formal education and would not be able or willing to go through the laborious process of registration and various paper works, it is concerning that most of the processes, such as tenure, royalties, and registration, are the same for both farmers variety and a normal variety. To encourage more farmers to take the effort to register and conserve different kinds, a simple and less time-consuming procedure for doing so needs to be implemented.

But enacting legislation is one thing; putting it into practice is quite another. As we can see, many farmers in India lack awareness of the rights and advantages that come with their innovations and output; in fact, the vast majority of farmers and village dwellers are illiterate. In this instance, the corporate sector has several opportunity to defraud and abuse the rights of farmers. The farmer needs to be made aware of their rights, how to use and safeguard their intellectual property, and how to do all of these things. In a similar vein, the government must oversee agreements that farmers and breeders have mutually reached and ensure that they have been fairly compensated for their contributions and have not been tricked into accepting less than what is fair to them.

Section 3(p) of the Indian Patent Act, 1970 prohibits the protection of traditional knowledge under Indian patent laws.

2005 Amendment

The goal of the 2005 Patents (Amendment) Act was to defend the rights of indigenous people. It requires patent applicants to reveal where the biological resources used in their ideas came from. The patent office may decline to award the patent if the information relates to traditional knowledge (TK). India switched over from process patent to product patent.

 ISSN: 2582-6433

The 2005 Amendment states that the following situations may result in a patent being revoked or a patent application being denied:

- If it turns out that the patent was obtained by giving incorrect and misleading information concerning the origin of the biological resources covered by the invention, the patent may also be revoked.
- The patent would not be be granted if it was only a compilation of many TK-related features.

If the patent can be considered anticipated given the knowledge that the indigenous populations possess.

The Act of 2001 Protecting Plant Varieties and Farmers' Rights (PPVFR)

The protection of plant breeders' rights over newly created varieties, as well as farmers' rights to register new varieties and conserve, breed, use, trade, share, and sell plant varieties they have created, improved, and preserved over multiple generations, is the main focus of the PPVFR Act 2001 and the PPVFR Rules 2003. As an alternative "sui generis" system that safeguards farmers' rights to formal inventions made by plant breeders, as well as their informal knowledge systems and traditional plant varieties, the Act represents a departure from the UPOV Model of 1991. This Act's key provisions, are those that deal with protecting farmers' interests. The procedures suggest paying local communities or sharing benefits when farmers contribute to the development of new varieties.

2023 Modification

In 2023, the Biological Diversity (Amendment) Bill, 2021, was approved. The Amendment made it clear that the National Biodiversity Authority Panel (**NBA)** consent must be obtained prior to the IPR being granted, not during the application process. Additionally, the Amendment exempted those with traditional knowledge from notifying the State Biodiversity Boards in advance of using biological resources.

Why is the protection of plant varieties necessary?

Breeding successfully needs a high level of expertise and understanding. Large-scale breeding also necessitates a substantial land investment, specialized machinery (such as greenhouses,

 ISSN: 2582-6433

growth chambers, and laboratories), and knowledgeable, scientific workers.

A successful plant variety requires a considerable time to grow (10 to 15 years for many plant species). However, not all novel plant varieties are a commercial success, and even in cases where the varieties demonstrate notable advancements, shifts in market demands may make a profit unlikely. Because of this, it's important to weigh the advantages against the high initial investment return. However, the general outcome of plant breeding is the availability of varieties that are better for society in terms of yield and quality.

Long-term, consistent breeding efforts are only beneficial if there is a possibility that the investment may be repaid.

Simultaneously, once a novel variation is made available, others can frequently replicate it with ease. As a result, the original breeder is denied a just chance to recoup their investment. Therefore, it is essential to establish an efficient system of plant variety protection that promotes the creation of novel plant varieties for the benefit of both breeders and society as a whole.

A seed is the fundamental unit of plant life, and this natural law has guided the occupation of farming for several decades. The farmers in India have sown seeds, harvested crops, and saved part of those harvest seeds for future use or trading with their neighbours. With the development in science and the coming of Genetically Modified (GM) plants, the productivity and quality of agricultural production has increased tremendously. This development, despite all its benefits, has drastically changed the legal framework of cultivation; by making seed harvesting for patented seeds an intellectual property violation. Patent laws have made it possible for a few people to have exclusive rights on some seeds and plant lives, and have raised the question as to whether the living organisms that have been genetically altered would qualify for patenting or not? If the patenting of plants is allowed in India, it can be disastrous for the farmers as they would have to pay heavy royalties on their farming produce.

While Section 3 of the Patents Act [1970] does not intend to allow patenting of the plants, a few loopholes in its interpretation has allowed some companies to get patents on the method of producing these plants On January 1, 1995, India joined the World Trade Organization.

It had to abide by the Trade Related Aspects of the Intellectual Property Systems (TRIPS)

 ISSN: 2582-6433

agreement in order to remain a member. "Adequate standards and principles concerning the availability, scope and use of intellectual property rights and effective means for the enforcement of these rights" are mandated under TRIPS for member nations.

Prior to TRIPS, India's patent system had been regulated by the Patents Act of 1970 (Patents Act). To begin making India's law consistent with TRIPS, the Patents Act was amended in 1999 and 2002 along with further modifications in 2005 in order to become fully TRIPS compliant.

Thus, by comparing both the TRIPS agreement and the Indian law we find that the Indian law in Section 3 (i), by the amendment of 2002, omitted the word "or plants" from the purview of Section 3 and with it methods of agriculture was also excluded from patentability in the Indian Patent Act to ensure that the seed, which is the first link in the food chain, was held as a common property resource in the public domain.

This amendment was a bolt from the blue for the Indian Farmers on their inalienable right to save, exchange and improve upon the seed. Thus, patents can now be granted for a process for treatment of plants, a GM seed which renders them free of disease or increases their economic value.

Section 3(j) was included as a new section in the 2002 amendment act. The creation or multiplication of genetically modified plants may be considered an innovation under this provision However, "plants and animals in whole or any part thereof, seeds, varieties and species, and essentially biological processes for production or propagation of plants and animals" are not included in this clause as inventions Patents on genetically modified organisms (GMOs) are permitted and this loophole, which is disguised as a scientific breakthrough, thus opens the door for the patenting of transgenic plants.

The right of farmers to control resources including genetically modified genes and traits is implied by patent protection. The basic underpinnings of agriculture will be compromised by this. For instance, a biotechnology business called **Sengene** has been given a patent in the United States for a sunflower cultivation that has an extremely high oleic acid concentration. Not only the genes causing the trait—high oleic acid, for example—was the subject of the claim.

Sungene has sent out notice to other sunflower breeders that any variety developed that has a high oleic acid content will be deemed to be in violation of its patent.

 ISSN: 2582-6433

It follows that a person who obtains a patent on a feature of a seed, other than the genes that produce the seed, not only owns the seed itself but also the entire plant.

Conclusion:

The question of why product patents on seeds were required through an amendment to the Patent Act arises in light of the fact that there is already a clear law protecting plant variations in the form of the Protection of Plant variations and Farmers' Rights Act, 2001. It causes confusion because it is unclear which protections the seeds of genetically modified crops will receive. Should they be protected as a plant variety or should they be patented?

Because the biotech sector is upending long-standing conventions, questions about who actually owns seeds will continue to arise, including those pertaining to the patenting of living forms and seed monopolies. The W.T.O. and the Indian parliament will need to address these, and a particular process that balances the interests of corporations and farmers alike needs to be sorted out. The patent dispute is far from ended; conventional types are now being pursued even more vehemently than the Green Revolution did.

The government stated that there is no scientific proof that genetically-modified crops would harm soil, human health, and the environment," in response to questions raised in the Rajya Sabha regarding the contentious decision by the Genetic Engineering Appraisal Committee (GEAC) in 2016 to approve experimental field trials of 12 GM crops in order to gather biosafety data. Twelve crops—cotton, rice, castor, wheat, maize, groundnut, potato, sorghum, brinjal, mustard, sugarcane, and chickpea—are prepared for field testing.

In light of the above depressing and bleak scenario surrounding genetically modified crops in our agricultural sector, the government should proceed cautiously, carefully considering the arguments put forth by the various stakeholders. This will ensure that the national interest is given top priority, restoring the vulnerability of native varieties to genetic contamination by these novel types, and maintaining our position as the world's most powerful economy in terms of import-export trade.

 ISSN: 2582-6433

References:

1. ISAAA 2013 Annual Report Executive Summary, Global Status of Commercialized Biotech/GMCrops: 2013 ISAAA Brief 46-2013, Retrieved 6 August 2014.
2. Paroda, Raj (Secretary) Biosafety Regulations of Asia-Pacific Countries FAO, APCoAB, APAARI, 2008. Retrieved 2 September 2012.