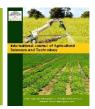




International Journal of Agricultural Sciences and Technology

Publisher's Home Page: https://www.svedbergopen.com/



Discussion Paper

Open Access

Protection of the breeders & farmers rights-UPOV & PPVFRA

Simran Bais1*

¹Student at Maharashtra National Law University, Nagpur, India. E-mail: baissimran@gmail.com

Article Info

Volume 1, Issue 3, August 2021
Received : 07 April 2021
Accepted : 15 July 2021
Published : 05 August 2021
doi: 10.51483/IJAGST.1.3.2021.8-13

Abstract

The paper encapsulates the position of Farmer's rights in the legislation concerning Protection of Plant Varieties and Farmer's Rights Act, 2001. India was confronted with an option to adopt UPOV model or go through its own legislative draft proposal. The model of UPOV was rejected by India due to the fact that rights of the farmers were not protected and instead the entire focus was on breeder's rights. The paper is a step forward to argue that the rights of the farmers are at different pedestal than the rights of the breeders especially in a country like India. there is a need to understand the history of PPVFRA legislation in terms of what were its loopholes and how it overcame major impediments. It is imperative to understand that the Farmers rights under intellectual property regime should be protected because with respect to plant genetic resources they do not have in depth scientific understanding but they certainly understand the paramount importance of plant genetic resources in agricultural field because its variability is a potential factor and this cannot be ignored. Moreover, from a long period of time the traditional knowledge which the farmer acquires in terms of selection of plant variety, improvising it and sustainable use of the same should be treated at par with intellectual inputs as this is certainly a monumental benefaction from the farming community. The paper discusses the main impediments of the legislation and suggest some measures to improvise the same.

Keywords: Protection of IPR, Plant varieties, Benefit sharing, UPOV, Breeders, Farmers

© 2021 Simran Bais. This is an open access article under the CC BY license (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made.

1. Introduction

1.1. Social construction and farmer's rights

It is essential to dwell in the concept of farmers rights and understanding it with respect to the Intellectual Property Rights it is essential to shed some light on the social construction of farmers rights to the development of plant genetic resources. It is imperative to know that the plant genetic resources form the building blocks for continuous crop improvements. At the same time, it is important to note that the farmers do not possess the necessary scientific knowledge but through their local understanding and knowledge they contribute greatly to the Genetic diversity in the field of agriculture. The level of autonomy exercised by the farmers in terms of selection, saving and maintaining the seeds for showing in his journey of entire agronomic transformation of the plant species into the crops and selection of the same needs' greater appreciation. For the evaluation of plant genetic resources, a pragmatic approach is required to be followed which if generated by the farmers could contribute to the income to a very large scale.

2710-3366/© 2021. Simran Bais. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

^{*} Corresponding author: Simran Bais, Student at Maharashtra National Law University, Nagpur, India. E-mail: baissimran@gmail.com

There is a loophole while studying the Intellectual Property Rights in connection to the farmer's rights as it does not throw in a flight on the intellectual efforts which are involved to create and improve variability. For instance, consider a situation where in motion it has been observed that the patent or essentially the plant breeders' rights are emergency much attracted towards the commercial games this particularly ignores the contributions are that have been made by the farmers which eventually create a fundamental base to the creation of the farmers rights.¹

1.2. Farmers' rights and IPR

The fundamental principle underlying the IPR on Plant varieties is providing according a recognition to the human innovation through the selection of a process or without the process of recombination or any other process which is a novel and distinct from the pre-existing varieties. It is imperative to note that the innovations which are made in nonbiological spheres such as the matter of crop varieties these are not completely created however, these are propagated further through natural process. Therefore, it can be peculiarly be stated that for the creation of a new plant variety there are two components these are firstly, the use of pre-existing varieties and subsequently the knowledge which is required to select a new variety either through the process of recombination, without recombination or by other processes. From the perspective of a long period the latter essentially represents greater cumulative intellectual inputs contributed by generations of farming communities over a period of time. The fact which is of immense consideration concerning the rights of the farmers is that it lacks identity as well as institutional backing which is quite distinct from the commercial plant breeders however, this should in no way mean that they should be given less importance or recognition as compared to that of the commercial plant breeders for the intellectual inputs. While it is imperative to understand that Intellectual Property Rights on plant varieties on one hand was upheld, the demand on the other side for free access to the varieties which are developed by the farmers without the payment of royalties applicable to the varieties which are protected and Intellectual Property rights can essentially be viewed as an activity of a double standard concerning rights. Moreover, the conferment of certain exclusive rights over the seed of propagating material of an intellectual property protected variety paves the way for a turning point by deviating the practice from the traditional and restricted rights farmers had enjoyed over seeds. The patent protected variety restriction on the seed is rigorous, with almost no flexibility for the farmers and minimal flexibility for the three days depending on the nature of jurisdiction.

2. Understanding the concatenation of events behind PPVFRA legislation

The drafting history of the protection of PPVFRA bill is very peculiar in nature and it accordingly created a huge spark of controversy regarding the same. Throughout its long history the bill has effectively fulfilled its objectives of engaging a wide variety of stakeholders in the course of its development.

It has the objective to introduce a systematic spear of Breeder's rights and operationalize farmers' rights of interest to various groups including public sectors, farmers, private industry and the intergovernmental organizations. The farmers were conspicuous with regard to their rights. The debate between developed and developing countries intensified when FAO came up with the establishment of a Commission as they realized the importance of materialization of rights concerning Farmers. The organization witnessed that due to rampant usage of resources by Multinational Corporations only there was underutilization of resources due to the adoption of their anti-common approach and in light of this particular proposition, SAI, 1985 was established as the foreign subsidiaries witnessed a strong foothold in India. This conference became a major breakthrough for the framework of legislation concerning Protection of Plant Varieties. There was various criticism which the first draft of the bill faced by many NGOs and farming communities for following the UPOV model because it didn't pay any attention to the recognition of farmer's rights. The second draft came up in the year of 1996 which was criticized on the basis of non-incorporation of ownership rights for farmers. The third draft came in 1997 which again received criticism for its aspect of vague benefit sharing regime. The final draft came up in the year of 2001 which equated the rights of the farmers at par with the rights of the breeders which was again a bone of contention because arguments were posed to treat agriculture as a special subject and confer to it some relaxations of Intellectual property. The reason for such argument was predominantly on the proposition that the farmers and breeders modus operandi is very different a breeder usually operates in a multinational scientific lab in a closed space and its results are mainly individualistic, R&D in nature attracted with the financial and commercial considerations whereas on the other side, the traditional farming practices are carried on by entire community of the farmers in agricultural field in

¹ S.P. Bala, Ravi. The rights of the Farmers, their scope and the legal protection afforded in the Indian regime.

open, through their own calculations. The results, goals and objective being varied the two should not be equated at par with each other.

3. Global agreements concerning PVP and the pool of genetic resources

In developing nations, the paradigm of liberalized trade and financial flows witnessed an expansion in the agricultural sector, agricultural R&D, the mergers of big corporates and the agrochemical as well as biotech companies.² This particular aspect represents the intensity of processes of commercialization and the commodification at large. The event of multinational seed agro-chemical and Biotech companies extends a call for a universal space of protection concerning IPR for the varieties of plants under the roof of WTO.³ As soon as the multinational corporations created their place in the agricultural sector, it aims to secure a certain minimum standard of IPR protection so as to minimize the risk and uncertainty which is associated with the R & D.⁴ It is important to note that under Art 27.3 (b) of the TRIPs Agreement the obligation of member countries of WTO vis-a-vis the PVP is enlisted.⁵ It particularly states that the Members shall provide for the protection of plant varieties through the help of patents or by any effective *sui generis* method or any alchemy of both the methods thereof. However, it is important to note that there is a lot of ambiguity surrounding the term effective *'sui generis system'* as there is no justification as to what this particular system looks like.

Notably this particular ambiguity gives considerable flexibility to the nations to develop a system that is in consonance to its nature of 'sui generis.' Ostensibly, it is presumed generally that an effective system of Sui generis is created with the aid of UPOV of PBRs.⁶ It becomes important to note that the protection of plant varieties and the enumerated farmers rights is heavily influenced by the model of UPOV of PBRs.⁷ The system of UPOV is of immense significance because it creates an alternative to patent protection. It is an undeniable fact that the patent covers inventions and generally has the criteria of non-obviousness, novelty and industrial application. However, the point of contention for the plant breeders' rights is that it extends to only the plant varieties and it is essentially required that the variety should be novel, distinct, uniform and stable. Regardless of the fact that whether the PVP takes the form of Plant Breeders rights or patents, an argument which particularly supports this contention is that it is necessary to encourage investment and innovation. In order to encourage research and development it must be ensured that the investors are assured of a reasonable return on their Investments. This particular assurance for investor's is undermined because of the fact that the ability of the plants to reproduce themselves cannot effectively implement an ownership and control rights exclusively over the matter concerning the plant genetic resources.

Therefore, through this particular study it has been observed that the process of reproduction of plants becomes a conundrum because it creates growers to reproduce the variety without further recourse to the breeders for the supply of the propagating material. It has been observed that the recovery of financial investment is not possible by the breeder. The process of innovation is observed from the lens of an individual enterprise of the breeders whose just rewards can be secured through the legal protection that the plant breeding rights offer. In the Indian context, the use of the word breeder is of significance in advancing this particular argument.

It is important to note that the IU on the PGRs and the CBD tends to offer contrary points in the matters concerning ownership and the control of PGRs in the global debates on PVP. The conference organized by the FAO in 1983 is although non-binding but it is the first international agreement which is used to address the issues concerning access and proprietary claims to the PGRs for Food and Agriculture. However, there has been a shift in the changes of the mindset. Initially it was thought that the PGRs are the common heritage of humankind and therefore it should be accessible to all. This particular idea provides the basis on which various countries and international gene banks are very successfully able to amass enormous amounts of the concerned plant genetic material without the consent as well as remuneration from the countries through which they obtained.

Correa, Carlos, M. (2000), Working Paper No 8, Geneva, South Centre 'TRADE- 'Trade Related Agenda, Development and Equity.'

The GATT is basically the General Agreements on Tariffs and Trade is the genus of which TRIPs Agreement is a species, now under the WTO.

⁴ Cullet, Philippe. (2000). The rights of the farmers in danger. Frontline, April 1-14.

⁵ Fowler, Cary. (1994). Not a Natural selection: Interplay of Technology, Politics and Plant Evolution. Gordon and Breach, Yverdon.

In 1961, six European western countries established UPOV. In 1968, the first UPOV Convention was formed and in 1972, 1978, and 1991 the Convention was essentially revised thrice.

⁷ India is not a member of UPOV as of 2019 in accordance with UPOV website however, it is planning to become a member.

4. The UPOV convention: Not aligned with farmer's rights

The fundamental characterization of the plant genetic resources which is the heritage of the Mankind evidently masks the fact concerning that they are also a significant strategic natural resource which points out to the importance of development of biotechnology that is mostly distributed in a non-uniform manner in most of the developing countries.⁸

It is evident to note that a range of developing nations including India have rigorously contested the discourse of common Heritage particularly in negotiations on the CBD. With an object to address the issue of proprietary claims concerning the plant genetic resources the IU has adopted several resolutions or agreed interpretations as attached that qualify the basic principle of free exchange. Through this particular channel due recognition is given to the plant breeders right as they are articulated in the UPOV convention and therefore, admits the PVP within the framework of the IU.

While going into this particular context, it is material for us to note that although the plant breeders' rights are recognized through IU however, it also advances the concept of farmers rights which initially in the resolution was defined as the benefaction of farmers in conserving, sustainably maintaining and improving the PGRs. The present and future generations have these rights conferred on the international community in the form of trustees with the objective that the farmers receive full benefits and supporting the contributions which they have made. The significant aspect of the farmers rights resolution is that it recognizes the contributions which are made by the farmers and intense to provide a platform from which the farmers can claim the aforesaid benefits from the use of PGRs.

5. Plant varieties and the traditional knowledge of indigenous and local communities: Benefit sharing regime

It is imperative to note that due recognition should be granted to the plant varieties as these are a component of the entire biodiversity which is a manifestation of the knowledge and practices of local communities and Indigenous communities. Therefore, in this particular context the expressions of claims to own and control plant genetic varieties are considerably different from the claims which are made in the discourses on intellectual property. The contribution to the conservation of biodiversity and improvements that have been brought forward in the field of PGR evidently gives rise to the rights or entitlements of the farmers and the holders of traditional knowledge. Hence, in this particular scenario there is a line of distinction which is made between the rights and claims to own and control the specific PGRs which are essentially linked to the conservation of biodiversity and the independent intellectual contributions.

Unlike the intellectual property rights the knowledge and innovations are recognized but they are not the basis on which rights and proprietary claims may be asserted. India's draft legislation consists of a number of key elements and the essential concepts which are provided in the TRIPS, UPOV, IU and CBD. As the touchstone of the Indian legislation, the draft intricately links the Global agreements and the national lawmaking process. In order to construct legislation that establishes Plant Breeders' Rights based on the model of UPOV India in this particular aspect adopted the *Sui Generis* model which articulates the concept of farmers rights derived from the IU.

The emergence for PVP in India is marked by the changes in environmental policies during the 1980s and 1990s which intended to facilitate the growth and political organization of the private industry. It is significant to understand that the period before 1980s the public sector used to control largely the plant breeding in India. A regulatory framework was adopted by the seed sector which prohibited the entry of large foreign and domestic firms and inhibited private sector R&D. The dominant action on PVP at that time was therefore effectively exercised by the public sector which contributed the proprietary rights over PGRs as inimical to the idea of public sector research. The year of 1986, witnessed the development of breeders' seeds, ¹⁰ which was provided by the public companies to the private ones which aid to have a germplasm collection for the latter. ¹¹

The New Seed Policy paved the way for liberalization in the industrial sector by 1988. ¹² Through this particular policy the permitted activities were the import of cereals, oilseeds by the companies which are collaborating with the foreign

⁸ Dutfield, Graham. (2000). IPR, Trade and the Biodiversity. Earthscan Publications, London.

Proceedings No 9, M S SWAMINATHAN RESEARCH FOUNDATION (1994A). Decoding the methodologies for identifying the function of informal innovation pertaining to preservation and sustainable usage of PGRs: An interdisciplinary dialogue. Madras.

Rao. (1997). 46, The first step in the seeds production is the Breeders seed, and are produced under the supervision directly of the breeders.

Shiva, Vandana. and Tom, Crompton. (1998). Monopoly and Monoculture: Trends in Indian Seed Industry. *Economic and Political Weekly*, September 26, pp A-137- A-1.

¹² Rao, C Niranjan. (1990). Plant Variety Protection and Plant Biotechnology Patents: Options for India. Allied Publishers, New Delhi.

firms. Through this process the New Seed Policy was applicable for a limited range of crops which carried the development of germplasm which was in line with the private sector.

6. Case study: Benefit sharing

The case study of *Jeevani* is essentially a must for the purposes of understanding the benefit sharing. *Jeevani* is basically a medicinal herb and in respect to this, four applications for patents were filed. The technology was licensed to Arya Vaidya Pharmacy Ltd. and in order to realize the commercial benefits, a trust was established the objective behind this was that if the local communities haven't conserved this rich biodiversity, then the probability of scientists experimenting it and coming up with such a medicinal drug was nil.

7. Critical analysis of PVP and farmers' rights: Are farmer's rights a mere decorative title?

- The institutional mechanisms for the protection of rights of the farmers are PPVFRA Authority which warrants that the farmers are provided with the variety which is sound in price as well as quantity the other mechanism is gene fund which modulates the finance matters in terms of benefit sharing and compensation. The Act requires that the revenue generated from the farmers variety's use is to be utilized by gene fund through which a portion is used for administrative maintenance of gene fund.
- If the seeds purchased by the farmers from breeders doesn't meet sufficient standards in terms of quality, then there is no fixed quantum of compensation rewarded to farmers, it would be solely at the discretion of authority, as discretion comes into picture and so does the arbitrariness.
- Another bone of contention is the burden of proof of innocent infringement of breeder's rights lies on the farmers themselves, though generally rule is the person who contends the burden of proof lies on them.
- There was a clear defenestration of classic property rights of the farmers as they were not allowed to use, exchange, sow, share and sell their own properties however it was amended later and now farmers have the right as before the Act.
- The Act mandates farmers to be vigilant and make applications to the authority which are often located at distances
 apart. They need to fight against big corporates having huge financial backings as discussed in below the biggest
 test for PPVFRA legislation.

8. Biggest test for PPVFRA legislation

The case of *Pepsico v. Bipin Patel case*, ¹³ the corporation contended that the Gujarat farmers were using some potato hybrids which were used in the manufacturing of Lays without the permission of the corporation. The court held that planting a registered variety by the farmers *per se* does not tantamount to an offence because the Act permits the farmers to reuse such varieties and also to share them with their neighbors subject to the conditions that *farmers cannot sell* 'branded seeds' which according to PPVFRA means any seed put in a package or any other container and labelled in a manner indicating that such seeds is a protected variety. ¹⁴

The Court observed that the variety in contestation was an extant variety which is a 'variety of common knowledge' and therefore, Court ruled in favor of farmers as it found that the big corporations and politicians are playing with the loopholes of law and troubling the farmer community at large. Pursuant to this, Pepsico proposes an out of court settlement to the farmers whom it had sued.

9. Conclusion

The research paper attempts to second the motion of promoting healthy collaboration between the public sector and the farmers. Therefore, in this context the law should try to provide some incentives that in a way promote R&D, innovation and simultaneously it could provide farmers with the use of technology which enable them to utilize the process of hybridization more efficiently. The need is to get acquainted the small and marginal farmers with some developmental accessories such as interest reduction in credit and access to infrastructural facilities through the medium of knowledge sharing.

Pepsico v. Bipin Patel. (2019).

S. 39 (1) (iv) of the Protection of Plant Varieties and Farmers' Rights Act, 2001.

The right to food security of the agricultural producers is inclusive to the farmer's right for the simple reason that the one who is feeding the entire nation should not be left in such a situation that his own subsistence is in difficulty. In the past years, it has been observed that the rural community is the most exposed section of society which is trapped in famine and food scarcity. Hence, in this particular context certain crops should be excluded from the IPRs so that this does not become an impediment or act as an aggravating factor in the generation of scarcity. The right of the farmers also includes the right to the production of diverse and healthy foods for fit consumption. The two research questions as formulated above are answered affirmatively to the effect that there is a line of distinction between the breeder's rights as well as the farmer's rights as the PPVFRA was the first act to grant formal rights to the farmers.

Appendix

Abbreviations	
UPOV	International Union for the Protection of New Varieties of Plants.
IPR	Intellectual Property Rights
PBR	Plant Breeder's Rights
PPVFRA	Protection of Plant Variety and Farmers Right Act, 2001 (PPVFR Act)

Cite this article as: Simran Bais (2021). Protection of the breeders & farmers rights-upov & ppvfra. *International Journal of Agricultural Sciences and Technology.* 1(3), 8-13. doi: 10.51483/IJAGST.1.3.2021.8-13.

M.S. Swaminathan. (1996). Research foundation; Farmer's Rights and Agrobiodiversity: The final report involving technical consultations on an implementation framework for Farmers' Rights, January 15-18. Madras.