

Benefit Sharing under The Protection of Plant Varieties and Farmers' Rights Act, 2001: A Critical Analysis

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Abstract

The concept of 'Benefit Sharing' is defined in clause (b) of Section 2 of The Protection of Plant Varieties and Farmers' Rights (PPVFR), Act 2001. It is based on the model of fair and equitable sharing of benefit in relation to the plants and plant genetic resources, between breeders and farmers which precisely, means equitable sharing of profits. This sharing not only ensures equality but also confirm environmental conservation and shared heritage vis-a-vis sustainable utilization. Section 26 of The Protection of Plant Varieties and Farmers' Rights (PPVFR) Act, 2001 provides for the determination of benefit sharing by the PPVFR Authority, which is the chief authority established under the Act, entrusted with some of the most important functions that is, to determine, regulate and utilize fair and equitable sharing of benefit. Though, in reality the concept was so vaguely and inadequately drafted that it collapsed and failed to attain its normative promise. Statutory and procedural ambiguities resulted in poor implementation of the provisions. One another reason behind the inability to access is lack of awareness about the subsistence of right to claim benefit sharing among farmers and local communities has contributed in failure. This is further broader because of the subsistence of wider discretionary powers in the hands of PPVFR Authority. Poor governance and lack of institutional support diluted the essence of benefit sharing and made it further ineffective. Hence, for effective implementation of benefit sharing there is a need to redraft the provisions and make it simple and comprehensible by an ordinary person. Awareness and training camps should also be organized. Some policy framework should be adopted for determining the claims.

The objective of this research paper is to investigate the rationale for recognizing and appreciating the concept of benefit sharing under the provision of PPVFR Act, 2001. It will also elucidate the statutory provisions dealing with benefit sharing under the enactment, suggest reforms for further strengthening and accessing benefit sharing for ensuring sustainability.

Key words: Benefit sharing, Plant Genetic Resources, breeder, farmers, sustainability etc.

Hypothesis

1. Equitable sharing of benefit is sine quo non for common heritage.
2. Enhancement of Institutional Capacity is imperative for effective implementation of Farmers' rights.

Introduction

The concept of benefit sharing is based on the fundamental principles of natural laws i.e. justice and equity between the user and conserver of traditional knowledge in the form of plant genetic resources and biological resources. Farmers, local communities and indigenous people are the conserver of the traditional knowledge who are conserving and preserving biological resources since ages without any recognition and rewards whereas, tech-savvy breeders or scientists use the plant genetic resources in the laboratories for breeding or developing new and essential developed plant variety by using biotechnology. Biotechnology is a group of technology that employ biological entities or processes to create new and useful product and processes. It is a technic of transferring genes from one species to another species to get the desired traits (Singh et.al. 2019). With the help of biotechnology, the tech-savvy breeder/s come-up with genetically modified plant varieties. Many a time, breeders bypass the contribution of local communities or farmers. This piracy of genetic resources

is known as bio-piracy (Raju, 2005). In the past, there are various instances of bio piracy like turmeric, neem, basmati and aloe vera etc.

So, the concept of benefit sharing should not be limited to only sharing of benefit but, it must also be applied for technology transfer, joint ownership of intellectual property, community development, capacity building and training. The operational accessibility lies in identification and awareness of claimants, simplified claim procedures, institutional and capacity building and effective distribution of benefits.

Benefit Sharing: International Perspective

Benefit sharing is not only recognized in national legal enactments but is equally shaped by various international conventions in its various principles dealing with biodiversity, plant genetic resources, farmers' rights and equitable sharing of benefit. Some of the international conventions behind the benefit sharing are, Convention on Biological Diversity (CBD) 1992, International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) 2001 and Trade Related Aspect of Intellectual Property Rights (TRIPS) 1994. The CBD recognizes state sovereignty over its resources, access to genetic resources, fair and equitable sharing of benefit between the user and conservator or preserver of genetic resources and protection of traditional knowledge etc. in its Article 1 and 15. The Nagoya Protocol, 2010 under CBD further provides about legal framework for Access to benefit sharing in detail.

The ITPGRFA directly deals with Plant genetic resources. The objectives of the ITPGRFA are conservation of genetic resources, sustainable use, transfer of technology and equitable sharing of benefit in its Article 13. It also recognizes intellectual property rights of farmers alongside preservation and conservation of resources. The ITPGRFA recognizes farmer's rights like residual rights of farmers' regarding traditional knowledge, equitable participation in sharing of benefit and decision making and prior informed consent. These rights are recognized under The Protection of Plant Varieties and Farmers' Rights (PPVFR) Act, 2001. The ITPGRFA recognizes a multilateral system for claiming a collective sharing of benefit based on the principle of justice and equity. Unlike the above stated two international conventions namely CBD and ITPGRFA, Trade Related Aspect of Intellectual Property Rights is different. It is not providing about benefit sharing but highly relevant as putting pressure to all member countries for protecting plant varieties.

On December 31, 1994, World Trade Organization (WTO) replaced General Agreement on Tariffs and Trade (GATT). GATT covered mainly goods whereas, WTO covers not only goods but expanded protection to services, protection to intellectual property under Intellectual property laws and, promotes non adversarial mechanism for resolving disputes. One of the agreements of the WTO is Trade Related Aspect of Intellectual Property Rights (TRIPS) 1994. The TRIPS was negotiated at the Uruguay Round broadly from 1989 to 1994 and came into force on January 1, 1995. It requires member states to confer intellectual property protection to all the intellectual property created by mind. The agreement puts a mandate on all the member countries of WTO, to adopt TRIPS for continuing their membership in WTO. It states all the inventions should be protected through Patent, the strongest form of IP protection (Venkatesan, 2018).

Article 27.3 (b) of the TRIPS gives option to member countries to confer protection to plants, animals and essential biological process by patent, an effective sui-generis system or a combination of both. India exercised discretion given under the TRIPS to member countries, and adopted The Protection of Plant Varieties and Farmers' Rights (PPVFR) Act, 2001. The object of this statute is to encourage development of new plant varieties. It is a unique form of protection as contrary to conventional nature of intellectual property which confers protection to not only to new plant variety but also to traditional plant variety in the form of extant plant variety and farmers' plant variety. The PPVFR Act categories plant varieties in four types i.e. new plant variety, essential derived variety, extant variety and farmers' variety. It confers protection to various stakeholders simultaneously, namely breeders, farmers and researchers (Cullet, 1999).

Benefit sharing: National Perspective

The concept of benefit sharing is based on the just, fair and equitable sharing of benefit between the tech-savvy breeder and farmers. In the context of traditional plant varieties and plant genetic resources, benefit sharing

makes a balance between the different persons or groups i.e. one who is conserving and protecting traditional knowledge related to plants and, another who used some traditional plant variety and made certain changes in it, for making it more useful and advanced. They both, breeder and farmer contributed in their own way.

Section 2 (c) defines the term breeder as a person or group of persons or farmers or any institution which has bred, evolved or developed any variety. The exclusive rights of the breeder are defined in section 28 namely, right to produce, sell, market distribute, import or export of the plant variety. Whereas, the term 'Farmer' is defined in section 2(k) which means a person who cultivates the land himself, supervises the cultivation of land and conserves and preserves traditional plant varieties. Farmer is the one who ensures rich plant biodiversity. The intellectual property rights of the farmers are conferred in chapter six from section 39 to 46. The rights of farmers are right to register plant varieties (farmers' variety and extant variety) like breeders and continue traditional practice of farming like right to save, use, exchange, share, sell farm produce but not branded seeds, immunity from infringement and exemption from payment of registration fees. They also have the right to get recognition and rewards for their contribution in conserving and maintaining traditional plant variety, right to claim compensation, right to give authorization in case of use of some farmers or traditional plant variety and share in the benefit accrues to a breeder (Babu, 2025).

Section 2(b) defines the term benefit-sharing in relation to a plant variety which means such proportion of benefit accruing to a breeder, agent or licensee for which a claimant is entitled as determined by authority under section 26 (Sreenivasulu, 2017).

Procedure for Determining claim

On receipt of the information from Registrar regarding the issue of certificate for registering a plant variety, the Protection of Plant Varieties and Farmers' Rights Authority (PPVFR) gets the certificate published (along with the details like name, address of the breeder/owner of the plant variety and details of registered plant variety) in the Plant Variety journal of India. The object of publication is to inform the public about the registration and invite application claiming benefit sharing for the said registered variety as per section 26 (1) of the Act. Sub-section (2) of section 26, provides that the application for claiming benefit sharing is filed by any person or persons or group of persons constituting such group, is a citizen of India, or firm, government or non-government organization if such firm or organization has contributed in the origination or development of a plant variety registered under the PPVFR Act (Ahuja, 2007). On receipt of application, the PPVFR Authority sends the copy of such claims to the breeder of the plant variety and, thereafter breeder of the variety has to submit his opposition /reply in prescribed period of time. As per sub-section (4), the PPVFR Authority will give the opportunity to both the parties and dispose of the application of benefit sharing claim. For determining the amount/share of benefit, the authority will consider the extent and nature of the use of genetic material of the claimant's plant genetic material in the development of the breeders' registered plant variety, along with its commercial value and demand in the market. Thereafter, the amount, so fixed by the PPVFR Authority, is deposited by the breeder in the National Gene fund under section 45. The Central Government constitutes a fund at national level in which this amount is deposited and, in case the breeder fails in depositing this amount, same can be recovered by the District Magistrate within whose jurisdiction the breeder resides or carry on business, as an arrear of land revenue.

Section 41 of the PPVFR ACT provides for rights of communities i.e. right to claim compensation for conserving genetic resources that contribute in the basis or origination of some registered plant variety. So, this provision specifically recognizes rights of farmer/s local communities and traditional knowledge holder of plant genetic resources. It mainly recognizes collective right or group right. It is ancillary to sharing of benefit.

Challenges and Concerns

Farmers in India are generally not aware and informed about the subsistence of such kind of enabling provision which enables and empowers them about claiming share in benefit which accrues to a breeder. Apart from this, the information regarding the registration of plant variety and details of certificate is being published in Plant variety journal of India because of which farmers or traditional knowledge holders are not getting information of publication. This lack of information results in significant gap in the accessibility. One another grey area,

subsisting regarding the claim of benefit sharing is, that the PPVFR Authority has great discretion in determining the claim i.e. without any statutory or policy framework for determining the amount of benefit sharing. It should be determined on the basis of some policy/formula like extent or contribution of genetic material in the origination and evolution of registered plant variety, and its commercial value.

The traditional knowledge related to plant is a unique form of knowledge which is transferred orally from one generation to another. In the dearth of documentation, it is not easy to maintain the records of plant genetic resources and, consequently subject to bio piracy

Literature Review

Dr. Vandana Shiva in her book, “who really Feeds the World” (Zed Books Ltd. London, U.K. 2015) has stated that it is the farmer, nature and women who actually ensure food security on earth and not the tech savvy breeder. The breeders contribute only thirty percent of food that people eat.

Dr Suman Sahai in her one of the articles namely, “India’s Plant Variety Protection and Farmers’ Rights Act, 2001” (Current Science, 2003) has discussed various provisions related to registration of plant variety protection, farmers’ rights, breeders’ rights and researcher rights.

Sudhir Kochhar in his article “Institution & Capacity Building for the Evolution of IPR Regime in India- Obligation and Opportunities in Handling Plant Varieties and Agricultural Biotechnology” (JIPR, November, 2008) has explained implication of IPR regime on Farmers and breeder, concern of equity and common heritage.

Mrinalini Kochupillai in her article “The Indian PPVFR Act, 2001: Historical and Implementation Perspectives” (JIPR 2011) has stated the legislative history of the legal enactment, objectives and various provisions related to different type of plant variety, registration process, rights of various stakeholders etc.

Amirthanath Sreedevi Babu in “Implementing Farmers’ Rights under the Plant Variety Protection Law in India: Analysing the Complex Regulatory Framework and its Impact” (The Journal of World Intellectual Property, 2024) has said that effective implementation of the provisions pertaining to farmers’ rights is difficult to implement because of the subsistence of arbitrary actions of central government and PPVFR Authority (Wiley.com)

Sourabh Batar and Dr. Harbansh Dixit in their article “Farmers’ Rights, Market Access and Social Justice: An Analysis of India’s Plant Variety Protection Regime” (Journal of Marketing & Social Research, December, 2025) the paper has explained the problems and prospect in effective implementation of PPVFR Act with regard to farmers’ right.

Methodology

The research paper adopts doctrinal research methodology in nature. It is largely theoretical focusing on critical analysis of the provisions, interpretation, ambiguities and inconsistencies in the various provisions of the statute. The study primarily relies on secondary sources comprising Books, journals and Articles.

Results

As per the PPVFR Authority website (<https://plantauthority.gov.in>) till January, 2026 there are 10, 491 plant variety registered in India. The details of the registered plant variety and certificate are specified on the website as well as in plant variety Journal. However, nothing has been specified on the website vis-à-vis plant variety journal about benefit-sharing i.e. about inviting applications for claiming share, process for determination, application format, time period etc.

Conclusion and Suggestions

It can be said that the benefit sharing is a progressive and unique concept like PPVFR Act theoretically but, in reality it suffers from various deficiencies like poor drafting, procedural uncertainties, non- disclosure by breeder, limited actual distribution of benefits by authority and delay in adjudication of disputes. For effective implementation and practical accessibility of benefit-sharing, farmers and local communities should be aware about their rights. The provision must move beyond being only a statutory promise and turn into a visible and accessible right. Some simple mechanism should be adopted to identify the contributor keeping in mind that the traditional knowledge is transferred and passed on from one generation to another without documentation. As identification of contributor is difficult therefore, proper documentation of plant genetic resources is required for real access. One another hurdle in accessibility is procedural complexity, incomplete disclosure by breeders and effective distribution of benefit by Authority. It should be simple and easy like registration details/ certificate should be published in local Newspapers, so that information is available and accessible. Awareness and training camps should also be organized for farmers and local communities at their places. So, PPVFR Authority has to play an active role in spreading awareness.

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