PROTECTION OF PLANTS VARIETIES AND FARMERS' RIGHTS: LAW, PRACTICE AND PROCEDURE (2018) by R.R. Hanchinal and Raj Ganesh. Published by Eastern Law House. Pp. 406. Price 790/- ISBN: 9788171773374.

THE INTRODUCTION of Intellectual Property (IP) laws in relation to plant varieties is a recent development compared to traditional forms of IP like patents, copyrights, and trademarks, etc. This facet of IP law focuses on safeguarding plant varieties, guaranteeing that inventors and pioneers in the field of agriculture can prevent unauthorized utilization and commercialization of their novel and unique plant varieties. The most notable framework for protecting plant varieties is the International Union for the Protection of New Varieties of Plants (hereinafter "UPOV").

Plant breeding and related innovations were primarily guided by traditional agricultural practices. Farmers used to save seeds from their best-performing plants for subsequent planting, to develop and improve crop varieties over generations. The mid-20th Century saw a significant shift in agricultural practices with the advent of the Green Revolution. It involved the development and dissemination of high-yielding crop varieties which marked the beginning of more intensive plant breeding efforts in India.

With time, plant breeding became more sophisticated and the need to incentivize innovation in this area led to the introduction of legal mechanisms. The UPOV Convention, established in 1961, was one of the earliest international agreements focused on providing protection to plant breeders.

When India became a signatory to the Agreement on Trade-Related Aspects of Intellectual Property Rights (hereinafter "TRIPS"), it had to restructure its domestic legislations in accordance with the said agreement. Article 27.3(b) of TRIPS essentially required India to create a unique and specialized law for the protection of plant varieties. The provision allowed countries to choose a system that suits their needs, which could involve patents or any other effective intellectual property protection mechanism for plant varieties. Therefore, India was prompted to craft a *sui generis* legal framework that addresses the protection of plant varieties to safeguard its domestic requirements while fulfilling its obligations under the TRIPS agreement.

Comprising a total of 21 chapters, this book delves into the intricacies of the Protection of Plant Varieties and Farmers' Rights Act, 2001 (hereinafter "the Act") offering a

¹ The Agreement on the Trade-Related Aspects of Intellectual Property Rights, 1994, art. 27.3.b. It states:

[&]quot;...However, Members shall provide for the protection of plant varieties either by patents or by an effective sui generis system or by any combination thereof. The provisions of this subparagraph shall be reviewed four years after the date of entry into force of the WTO Agreement."

comprehensive explanation of the provisions within the Act. Authored by Professor R.R. Hanchinal, Former Chairperson of the Ministry of Agriculture and Farmers Welfare, and Raj Ganesh, Legal Advisor to the Protection of Plant Varieties and Farmers' Rights Authority, the book presents a systematic overview of the Act. The preface of the book provides valuable insights into India's rich botanical heritage, highlighting the abundance of plant and flower varieties. It sheds light on India's longstanding tradition of seed cultivation and the introduction of the Protection of Plant Varieties and Farmers' Rights Act, 2001.

Chapter One is about the introduction of various kinds of intellectual properties, delving into their definition, nature, and diverse categories. It offers brief explanations on the kinds of intellectual property along with suitable examples. In addition, the authors have also provided relevant insights specific to the Indian context. This chapter touches upon the topic of the Protection of Plant Variety and its relevance and applicability to the Indian Laws. The authors talk about the Protection of Plant Varieties and Farmers' Rights Act, 2001 along with the Seeds Act 1966, and explains their objectives. This chapter serves as a foundational guide for the readers which even the readers with no legal background would easily comprehend.

Chapter Two throws light upon the genesis of Plant Variety Protection Laws. The chapter commences by emphasizing the significance of seeds on our planet and the importance of farmers in conserving them. The authors provide insights on the origination of plant variety protection laws and the important role played by the Plant Patent Act, 1930, in the United States. Some landmark cases² have been discussed later in this chapter explaining breeders' patent rights and plant variety protection. The author then explains the first UPOV Convention, which was held in 1961, to which India was not a signatory. The idea of UPOV was to protect the interest of commercial breeders to enhance their research and develop better varieties. The authors then talk about TRIPS and the Convention on Biological Diversity, 1992 (hereinafter "CBD) and how India's position with respect to plant variety protection changed. India became a signatory to the TRIPS Agreement in 1995 and then it enacted a sui generis law instead of adopting the already existing UPOV system.³ The CBD does not separately or unequivocally talk about farmers' rights. However, its objective of ensuring equitable sharing of biological resources is based on the ideals of the farmers' rights movement. Articles 15 and 16 talk about access to genetic resources and access and transfer of technology respectively provide guidelines for agreements for sharing of biological resources. This directly addresses farmers' rights.⁴

² Diamond v. Chakrabarty (1980) 447 US 303, 311-312.

³ Ruchi Tiwari, A Study of Rights of Farmers with Reference to IPR and Laws Relating the Seed in India 137 (2018) (Unpublished Ph.D. thesis, The Maharaja Sayajirao University of Baroda, Vadodara).

⁴ Vijay K. Tyagi, "Protection of Farmers' Rights under the Protection of Plant Varieties and Farmers' Rights Act, 2001: A Critical Study" 27 (2020) (Unpublished LL.M. Dissertation, Indian Law Institute, New Delhi).

The chapter also highlights the major difference between UPOV, 1991 and the Indian Law on Plant Varieties Protection.

Chapter Three thoroughly explains the roles and responsibilities of the Central Government under the Protection of Plant Varieties and Farmers' Rights Act, 2001 and the crucial functions of the Protection of Plant Varieties and Farmers' Rights Authority. Further, the author have extensively elaborated the significance of the Registry of Plant Varieties and its implementation and enforcement according to the Act. This chapter delves into the concepts of rule making, general functions of the Authority, delegation of power, civil court power, quasi-judicial proceedings with respect to the Authority, importance of registration of plant varieties along with its process.

Chapter Four delves into the eligibility criteria for applying for the registration of plant varieties and outlines the process for registration. It explains the procedures for registering both new and extant varieties of plants. The chapter further details various types of applicants, including foreign applicants, farmers or groups of farmers or communities of farmers, firms, partnership firms, sole proprietors, and government entities and the eligibility criteria for each of them. The procedures for registration of varieties have been developed in accordance with the advances that have taken place in plant breeding. Farmers and farmer groups specialised in seed production. This led to the rise of commercial seed production. Prior to this, there were no seed laws and no procedures for the registration of varieties in particular.⁵ In contrast to commercial breeders, who may have more extensive capabilities and expertise, the average farmer may find it difficult to meet the requirements for registration due to the limitations in resources and agricultural knowledge.

In Chapter Five the key concepts of N-DUS (Novelty, Distinctiveness, Uniformity and Stability) criteria for the registration of plant varieties, propagating materials, harvested materials and new varieties are thoroughly explained by the authors. The chapter talks about these concepts from the perspective of the UPOV Convention and the Indian Legal framework, citing relevant case laws. The latter part of the chapter discusses the application process and eligibility criteria for the registration of varieties, including Farmers' Variety, Public Domain Variety, Extant Variety, and Essentially Driven Variety, and how they align with UPOV and the Indian Legal framework, by citing relevant case studies. In contrast to the comprehensive analysis presented in this chapter, it is important to acknowledge that it falls short in addressing the challenges and difficulties that an average farmer encounters during the registration process. In the PPVFR Act, the distinctness, uniformity and stability (DUS) criteria have been defined to suit the domestic conditions. The Act provides that a variety is distinct, "if it is clearly distinguishable by at least one essential characteristic from any another variety whose existence is a matter of common knowledge in any country at

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the time of filing of the application"⁶.Uniformity is a relative criterion. The Act postulates that a variety is stable, "if its essential characteristics remain unchanged after repeated propagation or, in the case of a particular cycle of propagation, at the end of each such cycle."⁷ If uniformity and stability standards are read together, it can be concluded that stability and uniformity are linked to each other and if a variety in its essential characteristics remains unchanged after repeated propagation, then it is stable. Farmers' varieties are specialized for specific *niches* and are exchanged informally. They often show relative homogeneity within a species but unique distinctions between species due to repeated propagation. However, proving these traits for registration under the Act can be challenging. Demonstrating distinctiveness between such varieties might be difficult. Farmers maintain a certain degree of heterogeneity to cater for their customers requirements, hence farmers' varieties do not perfectly align with DUS standards.

The determination of denomination of a variety during the registration process is extensively discussed in *Chapter Six*-. It describes the denomination and tells us how the PPV and FR Act grants dual protection, namely one is the protection of the variety developed by the breeder and the other one is the denomination assigned by the breeder to the variety. It shows how unique the Act is compared to other IP laws in India. Upon comparison with UPOV, it was evident that certain similarities exist, along with some exceptions to a certain extent. Further, it delves into several critical aspects related to denominations, comparing trademark denominations with a variety denomination and it examines the association and utilization of trademarks with denominations. It further discusses alternate denominations, the protection of denominations concerning both UPOV and Indian Law, the criteria for infringement, deceptive and identical similarities and UPOV's standpoint regarding infringement cases. It then ends with the process of alteration of denominations and the implications of applying for a denomination falsely.

In Chapter Seven, the intricacies of applying for variety registration, DUS testing and the ultimate registration processes are thoroughly explained, by using the relevant registration forms. A comprehensive explanation of all the variables in the form is provided, followed by a detailed breakdown of the technical questionnaire. An outline is presented, covering the formalities of registration. In the later stage, the due process of application of Essentially Derived Variety (EDV) and Farmers' Variety is explained, concluding the chapter with the role of Registrar, criteria for DUS testing, advertisement of the application in the Plant Variety Journal of India, issuance of a certificate of registration and finally addressing the topic of opposition to the registered variety. The focus of this chapter has been on the technicalities in the plant variety

⁶ The Protection of Plant Varieties and Farmers' Rights Act, 2001, s. 15(3)(b).

⁷ Id., s. 15(3)(d).

registration process, which without any doubt, has been clearly explained by the authors. One positive aspect highlighted is that the farmers are exempted from paying the DUS test fee, which will motivate them to take the initiative to discover new varieties and claim protection for the same. However, for a regular farmer, it might require professional assistance and support to go through the entire registration process successfully.

In *Chapter Eight* of the book, the focus is on the opposition to the application of registration. It explores the significance and procedural aspect of opposition and its response from the applicant. A comprehensive overview is provided of the entire procedure of opposition, starting from its initial stage until its ultimate resolution. Moreover, relevant case laws⁸ are cited to develop a better understanding of the concept.

The debated topic of Provisional Protection is in depth discussed in *Chapter Nine*, through citing significant case laws and examples. It highlights the distinct character of Provisional Protection, mentioned in section 24(5) of the Act. It highlights the uniqueness of this concept as it is only present in the Actand in no other branch of IP law. The procedural aspect for claiming provisional protection is outlined, along with specific conditions that must be met. The authors have talked about the powers vested in the Registrar with respect to granting of provisional protection. The examples mentioned in the chapter can aid the readers in comprehending the topic with clarity. A thoughtful analysis is done addressing the constitutionality of section 24(5) of the Act, explaining the reasoning behind High Court of Delhi's decision to strike down the section and declare it void, on which the Supreme Court eventually granted a stay. At present the section has been reinstated in the statute, while the matter remains unresolved. Though section 24(5) of the Act may currently serve the purpose of preventing abuse, it grants unguided power to the Registrar, which might not serve the very object of the Act.

Chapter Ten of the book provides a concise overview of the protection period granted to different varieties, which constitutes the fundamental purpose of enacting this Act, along with farmers' rights. All the varieties have been thoughtfully presented in a tabular form and it is concluded by discussing Public Domain Varieties and its limitations. These varieties are namely New Varieties, Extant Varieties and Application of Convention Country. New and Extant Varieties have been discussed earlier in this review. Application from Convention Country refers to the Act of submitting an application to protect a plant variety in a country that is a participant in international

⁸ Nuziveedu Seeds v. Maharashtra Hybrid Seeds 2010 (44) PTC 341; Mahycov. Union of India, order dated Nov. 30, 2011 of High Court of Delhi in WP (C) 8431 of 2011.

⁹ Prabhat Agri Biotech Ltd.v. Registrar of Plant Varieties, Order dated Dec. 12, 2016 in W.P.(C) 250/2009.

¹⁰ Ibid.

agreements or conventions. These categories play an important role in the legal framework of Plant Variety Protection and Farmers' Rights.

Chapter Eleven explores the concept of Benefit Sharing, tracing its origin to the Biological Diversity Act, 2002. It includes a detailed comparison between the definitions of benefit sharing in the PPV and FR Act 2001 and the Biological Diversity Act 2002, which is well presented in a tabular form.¹¹ It is pointed out by the author that benefit sharing mentioned in the Act is applicable to varieties registered under the PPV and FR Act only, but on the other hand, benefit sharing under the Biological Diversity Act is applicable to biological resources obtained by foreign citizens or foreign entities for commercial utilization or obtaining IP rights over biological resources. The process of benefit sharing under the Plant Varieties Protection is well elaborated along with all the necessary criteria. It ends by discussing the position of benefit sharing in the UPOV and it is noteworthy to mention that it is not a part of UPOV's framework. The concept of benefit sharing is exclusive to Indian law, which makes it a unique system in itself. This concept is specifically incorporated into our law because we consider farmers the gene conserver and originators, who play a key role in the development of new plant varieties. Such laws are vital for the promotion of new varieties and farmers in our society. Encouraging such Acts and advocating for additional laws in favour of the farmers is essential.

Chapter Twelve introduces assignment, transmission, agency, and license. The content focuses on the procedural aspect of these concepts, such as registration, and the status of these elements before and after the registration, as well as highlights the distinction between them. The last section of the chapter discusses the repercussions of infringement, and the rights granted to the registered agent and licensee and also touches upon the duration of the agency and license, along with other technical details.

Chapter Thirteen is dedicated to a crucial aspect of the Act, focusing on the fundamental topic of Researchers' Rights. Among the three pillars of the Act, namely Breeders' Rights, Farmers' Rights and Researchers' Rights, this chapter talks about Researchers' Rights. Section 30 of the Act is explained in detail, which outlines the rights granted to the researchers. Despite the chapter being concise, the chapter concludes by addressing the position of researchers' rights in the UPOV, which could also be called an exception to the breeders' rights.

Chapter Fourteen covers the procedural and technical aspects related to the surrender of the certificate, rectification of the register, correction of the register, and revocation of protection granted to registered varieties. It also elucidates the concept of opposition to surrender and the process of contesting such opposition. Moreover, it outlines the

¹¹ R. R. Hanchinal and Raj Ganesh, Protection of Plant Varieties and Farmers' Rights: Law, Practice and Procedure 165 (Eastern Law House, Kolkata, 2018).

distinct roles played by the registrar in these aspects. A clear distinction is drawn between cancellation, change and rectification of the register and certificate of registration, ¹² as well as correction of the register and certificate of registration. It concludes by outlining the criteria that must be met for the revocation of protection granted to a registered variety.

Chapter Fifteen is a brief chapter that talks about Annual fees and Renewal fees. It explains their applicability and differentiates between the two.

Chapter Sixteen holds immense significance as it talks about a pivotal aspect of the subject matter. India is the first country to add a separate chapter on farmers' rights in the Act. This chapter delves into the pioneering aspect of a particular Act that grants intellectual property rights to the farmers, effectively treating them on equal footing with the breeders and other claimants. The focus of this chapter is on the establishment of farmers' rights, which are placed above other provisions. It elaborates on the definition of farmers as per the Act, highlighting the emphasis placed on cultivation and conservation rather than mere land ownership or holdings. The legislation recognizes the farmers as breeders. The Act encompasses a comprehensive range of rights for farmers, including the idea of compensation if a registered plant variety fails to perform as expected under specific conditions.¹³ It elucidates the nature of compensation awarded by the authority, along with the protective measures in place for farmers in cases of unintentional infringement. It also mentions various prestigious awards that are offered to the farmers every year, which include substantial cash prizes. The stance of UPOV regarding farmers' rights is also talked about, where it allows member countries the choice of incorporating farmers' rights. It is distinct in Indian Law, as it permits a horizontal exchange of registered varieties and even the sale of a registered variety in a "loose bag" is lawful. By analyzing the data from the annual report of the Protection of Plant Variety and Farmers' Rights Authority¹⁴, it becomes clear that Farmers' varieties account for the maximum number of applications received for registration. However, their percentage share in total certificates granted is much less, standing at 42.03% only. India being the first country in the world to adopt a legal framework that recognizes farmers' rights, still needs to work a lot to safeguard farmers' rights. Farmers need to be educated about the rights that have been under this Act so that they can empower themselves and stand on equal footing with international farmers.

Chapter Seventeen addresses both the foundational and procedural aspects associated with Compulsory Licenses within the framework of the Act. It delves into the criteria

¹² Id. at 192.

¹³ The Protection of Plant Varieties and Farmers' Rights Act, 2001, s. 39 (2).

¹⁴ Calculations from the annual reports of the Protection of Plant Variety and Farmers' Rights Authority, various issues (2007-2019), available at: http://www.plantauthority.gov.in/annualrpt.htm (last visited on April 17, 2024).

for raising opposition. It covers all the procedural requirements, ranging from the initiation of a compulsory license application to its duration, potential revocation, and alterations. The relevant provisions are also mentioned in the chapter.

Chapter Eighteen is dedicated to discussing the process of appealing to tribunals. It commences by introducing the establishment of the Plant Variety Protection Appellate Tribunal, responsible for overseeing appeals against decisions made by authorities or registrars and the composition of the authority. It then delves into the jurisdictional aspect of the appellate authority and concludes by addressing the instances in which the Intellectual Property Appellate Board, established under Section 83 of the Trade Marks Act, can exercise the jurisdiction, power, and authority vested in the tribunal by the Act.

Chapter Nineteen explores the intricacies of infringement. It starts with a well-known maxim, where there is a right, there is a remedy. It provides a brief explanation of the remedies available concerning infringement in both civil and criminal contexts. It delves into the meaning of infringement according to the provisions mentioned in the Act along with the reliefs that can be sought in cases related to the same. Furthermore, the chapter examines the Anton Pillar order, a legal provision specific to intellectual property rights. An Anton Pillar order allows a plaintiff to obtain a court order to search the defendant's premises and seize evidence without prior notice. The criteria for the same are outlined in a clear manner. It then goes on to elucidate *ex-parte* injunction and the process of appealable injunction. It then delves into the concept of Breeders' Rights with respect to article 30 of UPOV 1991, which seems to lack clarity, when viewed closely.

Chapter Twenty of the book explores the violations and sanctions outlined in the Act, which are laid out in sections 68 to 77 of the Act. It elaborates on the consequences related to incorrectly using the name of a registered plant variety, along with the associated penalties. It also addresses the transgressions that corporations might commit in relation to the pertinent regulations outlined in the Act. It concludes by talking about the protection of farmers from criminal proceedings if he proves that he was not aware of the existence of the protected rights that were infringed by him in the course of business.

The book as a whole, is skilfully crafted and well-structured. The authors have incorporated relevant and real-life instances to describe the legal intricacies. It uses case laws to provide practical context that helps readers to understand the intricacies of the subject matter. On the contrary, it does not delve into the practical implementation of these laws, particularly within the unique context of India being the pioneering nation to acknowledge farmers' rights in the Plant Varieties Act. Greater emphasis could have been placed on depicting the actual situation at the grassroots level within the country, particularly in relation to farmers' rights. By focusing more

on the real-world context, the book could have provided a more comprehensive understanding of how these rights are practiced by the farmers. This could involve shedding light on different aspects, such as day-to-day challenges, local practices, economic impact, legal literacy etc.

The book provides a holistic view of the Indian plant variety protection law, focusing exclusively on the viewpoint of individuals who are part of the regulatory authorities responsible for enforcing these laws. However, it fails to discuss and address the issues faced by the farmers, considering the fact that India was the first country to provide for a separate chapter on the rights of farmers in the plant varieties laws. This book makes a modest effort to present a fundamental understanding of the law, but it falls short in accurately portraying the ground reality.

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