Abstract

Robyn Ott is currently a third-year law student at the University of Oklahoma College of Law. She is also the managing editor of the Oklahoma Journal of Law and Technology for the 2004-2005 academic year. Ms. Ott wrote this article under the direction of Professor Drew Kershen while she was a member of the Project on Intellectual Property Rights in Living Matter. Below, Ms. Ott discusses India's laws pertaining to protection of plant varieties and farmers' rights. The Indian Parliament enacted the Protection of Plant Varieties and Farmer's Rights Act of 2001 in order to spur the development of new varieties of plants by providing protection for developers of new plant varieties.

Edited by Jennifer Stevenson

PROTECTION OF PLANT VARIETIES AND THE FARMER'S RIGHTS ACT

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I. Introduction

India became a member of the World Trade Organization on January 1, 1995.¹ As a member, India was then required to comply with the Trade Related Aspects of the Intellectual Property Systems (TRIPS) agreement.² Specifically, Article 27.3 (b) of TRIPS requires member countries to protect plant varieties either by patents, or by an effective *sui generis*³ system of protection.⁴ Electing to comply using the *sui generis* option, the Indian Parliament passed the Protection of Plant Varieties and Farmer's Rights Act (PPVFR),⁵ in August 2001.⁶ The purpose of PPVFR is "to provide for the establishment of an effective system for protection of plant

¹ World Trade Organization, *Understanding the WTO: The Organization, at* http://www.wto.org/english/thewto-e/whatis-e/tif-e/org6-e.htm (Apr., 4, 2003).

² Stephen Barnes, *Pharmaceutical Patents and TRIPS: A Comparison of India and South Africa*, 91 Ky. L.J. 911, 917 (2002-2003).

³ Sui generis, which translates roughly into self-generating, means that a country can decide on any system, provided the system grants "effective plant breeder's rights." Suman Sahai, *India's Plant Variety Protection and Farmers' Rights Act, 2001*, CURRENT SCIENCE, Feb. 10, 2003, at 407, http://www.ias.ac.in/currsci/feb102003/407.pdf (last visited Feb. 12, 2004).

⁴ World Trade Organization, *TRIPS: A More Detailed Overview of the Trips Agreement, at* http://www.wto.org/english/tratop_e/trips_e/intel2_e.htm (last visited Feb. 12, 2004).

⁵ B.J. Krishnan, *Move to Join UPOV*, HINDU BUSINESS LINE, Oct. 2, 2002, *available at* www,blonnet.com/2002/10/02/stories/2002100200230900.htm (last visited June 7, 2004)...

⁶ V.B. JUGALE, TRADING OF AGRICULTURAL COMMODITIES UNDER THE IPR REGIME: PBRS AND FRS IN INDIA 5, http://www.sisshyd.net/siss/docs/jugale.doc (last visited Feb. 12, 2004).

varieties, the rights of farmers and breeders, [and] to encourage the development of new varieties of plants "7

The key element of PPVFR is the protection of intellectual property rights for plant varieties by a registration process.⁸ Under this process, four types of varieties can be registered. Through the registration process, both breeders and farmers of the plant varieties are protected and given rights. PPVFR further gives rights to researchers, the government, and the public. This eBrief describes the four types of varieties available for registration, explains the rights of each group protected under PPVFR, and identifies pending considerations by the Indian Government that will have altering effects on the current PPVFR Act if they are enacted.

II. PPVFR Varieties

A variety is a plant grouping, except for microorganisms within a single botanical taxon of the lowest known rank, which can be defined by certain characteristics. Under PPVFR, any person claiming to be the breeder of the variety, successor or assignee of the breeder, or any farmer, group of farmers, university or publicly funded agricultural institution claiming to be the breeder any of the four types of varieties. These new varieties, extant varieties, essentially derived varieties, and farmers' varieties.

⁷ Protection of Plant Varieties and Farmer's Rights Act (PPVFR) pmbl. (2001) (Act 53 of 2001) (India).

⁸ ANITHA RAMANNA, ENVIRONMENT AND PRODUCTION TECHNOLOGY DIVISION, INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE, INDIA'S PLANT VARIETY AND FARMERS' RIGHTS LEGISLATION 14 (2003) http://www.ifpri.org/divs/eptd/dp/eptdp96.htm (last visited Feb. 12, 2004).

⁹ PPVFR § 2(za). The characteristics required: the plant grouping must be (i) defined by the expression of the characteristics resulting from a given genotype of that plant grouping; (ii) distinguished from any other plant grouping by expression of at least one of the said characteristics; and (iii) considered as a unit with regard to its suitability for being propagated, which remains unchanged after such propagation, and includes propagating material of such variety, extant variety, transgenic variety, farmers' variety and essentially derived variety. *Id.*

¹⁰ *Id.* § 16(1); *see* RAMANNA, *supra* note 8, at 16. Further, these actors may register individually or jointly with any other person. PPVFR § 16(2).

¹¹ PPVFR § 16(1); see RAMANNA, supra note 8, at 16.

¹² PPVFR ch. III, IV, VI; see RAMANNA, supra note 8, at 14-15.

In order to be classified as a new variety, the variety must conform to the criteria of novelty, distinctiveness, uniformity, and stability.¹³ Generally, existing plant breeders will register for a new variety.¹⁴ These breeders include private sector breeders registering for their variety's protection and public sector institutions and universities "if they innovate and produce new varieties."¹⁵ The duration of registration of a new variety extends for nine years for trees and vines, and six years for other crops.¹⁶ This period may be reviewed and renewed for eighteen years in the case of trees and vines, and fifteen years for other crops.¹⁷

The essentially derived variety is a variety that is "identical to the parent variety save a single character change." The essentially derived variety can be derived directly from a parent variety, or can come from a variety that was predominantly derived from a parent variety. The essentially derived variety must keep the essential characteristics that result from the initial variety's genotype, but at the same time must be clearly distinguishable from the initial variety. The

India's concept of an essentially derived variety differs from that of the Union for Protection of New Plant Varieties (UPOV).²¹ UPOV gives the initial breeder the rights over essentially derived varieties.²² PPVFR, however, gives the rights to breeders who develop the essentially derived variety.²³ The essentially derived variety breeder is required, however, to

¹³ PPVFR § 15(1). See *id*. § 15(3) for the statutory definitions.

¹⁴ RAMANNA, *supra* note 8, at 16.

¹⁵ *Id.* at 17.

¹⁶ PPVFR § 24(6).

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¹⁸ KS Jayaraman, *Indian Seed Bill Forges New Ground*, NATURE BIOTECHNOLOGY, Oct. 2001, *available at* http://www.nature.com/cgi-taf/DynaPage.taf?file=/nbt/journal/v19/n10/index.html (last visited June 7, 2004). ¹⁹ PPVFR § 2(i).

²⁰ *Id*.

²¹ RAMANNA, *supra* note 8, at 17.

²² Id

²³ PPVFR allows the breeder to "authorize any person to produce, sell, market or otherwise deal" with their registered variety. PPVFR § 28(2). The Act then says that this authorization is from the initial variety breeder to the essentially derived variety breeder. *Id.* § 23(6). Further a breeder is defined as "a person or group of persons or a farmer or group of farmers or any institution which has bred, evolved or developed any variety." *Id.* § 2(c).

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obtain authorization from the initial breeder when the initial variety will be used repeatedly as a parental line for commercial production of a newly developed variety.²⁴ PPVFR notes, however, that the initial variety breeder may provide authorization to the essentially derived breeder upon terms and conditions which both mutually agree.²⁵ For successful registration of an essentially derived variety, the Central Government must specify the genus or species of the variety.²⁶ The Authority²⁷ will then conduct tests on the variety to conclude that it is derived from an initial variety. 28 For an essentially derived variety, the certificate of registration is valid for nine years and renewable up to eighteen years for trees and vines, and valid for six years renewable up to fifteen years for other crops.²⁹

An extant variety is a broad category covering varieties available in India that are notified under section 5 of the Seeds Act, 1966;³⁰ farmers' varieties; varieties of common knowledge; or any other variety that is in the public domain.³¹ Unlike other varieties protected under PPVFR, an extant variety protects existing varieties.³² The extant variety, therefore, is not required to show novelty.³³ However, distinctness, uniformity, and stability³⁴ must still be established.³⁵

²⁴ *Id.* § 30.

²⁵ *Id.* § 23(6).

²⁶ *Id.* § 29(2).

²⁷ The Protection of Plant Varieties and Farmers' Rights Authority is a corporate body overseeing PPVFR with the duty to "promote, by such measures as it thinks fit, the encouragement for the development of new varieties of plants and to protect the rights of the farmers and breeders." *Id.* § 8(1). 28 *Id.* § 23(3).

²⁹ *Id.* § 24(6).

³⁰ Section 5 of the Seeds Act, 1966, provides that the Central Government can notify any kind or variety of seed which it thinks is necessary or expedient to regulate for quality. Seeds Act § 5 (1966) (Act 54 of 1966) (India) at http://www.vigyan.org.in/seedact.html.

³¹ PPVFR § 2(j).

³² RAMANNA, *supra* note 8, at 18.

³⁴ The three requirements for an extant variety are to be defined by the Authority. PPVFR § 15(2). As of January 2003, the Authority has not given any definition. RAMANNA, *supra* note 8, at 18. ³⁵ PPVFR § 15(2).

PPVFR gives the breeder of the extant variety³⁶ rights to the extant variety, so long as the breeder claims his right.³⁷ The registration of an extant variety is valid for nine years for trees and vines and six years for other crops, but all plants can be renewed for fifteen years from the date of the notification of the variety by the Central Government.³⁸

The farmers' variety will generally be registered by farmers. ³⁹ This variety is a variety "which has been traditionally cultivated and evolved by the farmers in their fields, or is a wild relative or land race of a variety about which farmers possess a common knowledge." ⁴⁰ As a result, novelty will not be a criterion necessary for registration. PPVFR is unclear, however, on whether distinctness, uniformity, and stability are required for the farmers' variety. ⁴¹ Further, it is not clear under PPVFR how long a registration can be valid for a farmers' variety. ⁴²

III. Breeders' Rights

Under PPVFR, a breeder is "any person or group of persons or a farmer or group of farmers or any institution which has bred, evolved or developed any variety." This section will focus on the rights given to breeders for new varieties, essentially derived varieties, and extant varieties.

For new varieties and essentially derived varieties, breeders or their successors, agents or licensees, are extended the exclusive right to "produce, sell, market, distribute, import or

³⁶ PPVFR give the extant variety right to any person claiming to be the breeder of the extant variety, any breeder's successor or assignee, or any farmer, group of farmers, university or publicly funded agricultural institution claiming to be the breeder of the extant variety. *Id.* § 14(b); *see id.* § 16(1). Breeder is defined as "a person or group of persons or a farmer or group of farmers or any institution which has bred, evolved or developed any variety." *Id.* § 2(c)

³⁷ *Id.* § 28(1). PPVFR also specifies that an extant variety can be registered under the Act within a specified period, but does not provide the length of this period. The Authority is directed to specify. *Id.* § 15(2). ³⁸ *Id.* § 24(6).

³⁹ RAMANNA, *supra* note 8, at 17.

⁴⁰ PPVFR § 2(1).

⁴¹ RAMANNA, *supra* note 8, at 19.

⁴² *Id.* at 15.

⁴³ PPVFR § 2(c).

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export"⁴⁴ their variety.⁴⁵ Essentially, the breeders are entitled to control the formal marketing,⁴⁶ production, and commercialization of their variety.⁴⁷ The extant variety breeder also has these same exclusive rights, but only if the breeder claims the right.

In addition to the exclusive rights given to breeders, their varieties are protected through substantial punishment provisions. Penalties are imposed for infringing on the breeders' varieties and also on their packaging.⁴⁸ Falsely representing to have registered a variety is punishable by imprisonment of not less than six months nor more than three years, or a fine of not less than one lakh⁴⁹ rupees nor more than five lakh rupees,⁵⁰ or both.⁵¹ The penalty for falsely using the breeders' denomination⁵² or name is imprisonment of not less than three months nor more than two years, or a fine not less than 50,000 rupees nor more than five lakh rupees,⁵³ or both.⁵⁴ To give strong breeders' further rights, the burden of proof is on the accused to show no false use of the breeders' denomination.⁵⁵

⁴⁴ *Id.* § 28(1).

⁴⁵ This right comes with one stipulation: Breeders must declare that their variety does not contain any gene or gene sequence involving terminator technology. § 18(1). Terminator technology "genetically switches off a plant's ability to germinate a second time." Anup Shah, *Genetically Engineered Food, at* http://www.globalissues.org/EnvIssues/GEFood/Terminator.asp (last modified July 14, 2001).

⁴⁶ Sahai, *supra* note 3.

⁴⁷Jayaraman, *supra* note 18, at 895.

⁴⁸ PPVFR § 64.

⁴⁹ Lakh is the number 100,000.

⁵⁰ \$2,208.97 US\$ to \$11,044.84 US\$

⁵¹ PPVFR § 72.

⁵²"'Denomination', in relation to a variety or its propagating material or essentially derived variety or its propagating material, means the denomination of such variety or its propagating material or essentially derived variety or its propagating material, as the case may be, expressed by means of letters or a compilation of letters and figures written in any language." *Id.* § 2(g).

⁵³ \$1,104.48 US\$ to \$11,044.84 US\$

⁵⁴ PPVFR § 70.

⁵⁵ *Id.* § 69(3). Persons employed in the ordinary course of business who act without any intention to commit the offence, who have taken all reasonable precautions against committing the offence charged, who had no reason to suspect the genuineness of the act charged, and who give all information in their power with respect to the persons on whose behalf the offence was committed, will be acquitted. *Id.* § 75.

Breeders whose rights have been infringed receive an injunction and the option of either damages or a share of the profits.⁵⁶

IV. Farmers' Rights

PPVFR is unique, making India the only country in the world to grant "clear and explicit rights to farmers." Farmers under PPVFR are those who cultivate crops, or who conserve and preserve or add value to any wild species or traditional variety. 58

PPVFR gives farmers the right to "save, use, sow, resow, exchange, share or sell [their] farm produce including seed of a variety protected under this Act... provided that the farmer[s] shall not be entitled to sell branded seed of a variety protected under this Act." As a result, farmers are entitled to sell locally any variety of seed that they grow, even if the variety has been granted a breeders' right. The farmers are prohibited, however, from selling seed that is "branded" by being packaged and labeled in a way indicating that the seed is protected under PPVFR. As a result, farmers are allowed to sell the breeders' seed under another denomination.

Farmers are also protected from terminator technology, meaning breeders are forbidden from marketing a variety that prohibits a plant from germinating a second time. ⁶³ In addition, breeders are required to disclose to farmers the expected performance of the variety under given

⁵⁶ *Id.* § 66(1).

⁵⁷ Press Release, Gene Campaign (Sept. 2, 2003), http://www.genecampaign.org/civil.html (last visited Jan. 13, 2004).

⁵⁸ PPVFR § 2(k).

⁵⁹ *Id.* § 39(1)(iv).

⁶⁰ Id.; see Response to Gene Campaign's PIL: Government Admits It Will Not Protect Farmers' Rights, Only Breeders Rights 3 (Apr. 2003), at http://www.genecampaign.org/april.html [hereinafter Response].

⁶¹ PPVFR § 39(1)(iv); see RAMANNA, supra note 8, at 13.

⁶² Bernard Le Buanec, Remarks at WIPO-UPOV Symposium on Intellectual Property Rights in Plant Biotechnology 8 (Oct. 24, 2003), *at* http://www.upov.int/en/documents/Symposium2003/panel_discussion.pdf.
https://www.upov.int/en/documents/Symposium2003/panel_discussion.pdf.
https://www.upov.int/en/documents/Symposium2003/panel_discussion.pdf.

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conditions.⁶⁴ If the propagating material fails to perform as specified under the given conditions, farmers may claim compensation⁶⁵ from the breeders.⁶⁶

Furthermore, when breeders use the farmers' variety to breed a new variety, the breeders must pay a royalty into the National Gene Fund.⁶⁷ This concept, called benefit sharing, gives rights and rewards to farmers for contributing to the creation of new varieties of agriculture.⁶⁸ Also, farmers are granted an exemption from infringing on any PPVFR right when the farmers at the time of the infringement, did not know of the existence of the right.⁶⁹ Finally, farmers will receive all the rights and protections of a breeder, if the farmer breeds or develops a new variety.⁷⁰

Under PPVFR's system of dual rights, "the breeder[s are] rewarded for [their] innovation by having control of the commercial market place but without being able to threaten the farmers' ability to independently engage in [their] livelihood, and supporting the livelihood of other farmers."

⁶⁴ *Id.* § 39(2)

⁶⁵ Right to compensation is requested to the Authority. The Authority shall give notice to the breeder of the variety and give the breeder an opportunity to file opposition. After hearing the parties, the Authority "may direct the breeder to pay such compensation as it deems fit." *Id.*

⁶⁷ The National Gene Fund holds money paid by breeders when using farmers' varieties for producing a new variety. The proceeds of the fund "go toward farmer's welfare-maintenance of community gene banks or compensation for crop failures, ect." Jayaraman, *supra* note 18.

⁶⁸ RAMANNA, *supra* note 8, at 6.

⁶⁹ PPVFR § 42(i).

⁷⁰ *Id.* § 39(1)(i).

⁷¹ Sahai, *supra* note 3, at 409.

V. Researcher's Rights

Although the breeders' and farmers' varieties are protected, PPVFR allows any person to use any registered variety for conducting experiments or research, and also allows any person to use a registered variety as an initial source for the purposes of creating other varieties.⁷²

This provision, however, implements a restriction on the use of a registered variety "where the repeated use of such variety as a parental line is necessary for commercial production of such other newly developed variety." In such circumstances, the initial breeders' authorization is needed. Because PPVFR grants essentially derived variety rights to the breeder who developed the essentially derived variety, nearly all research performed with a protected variety could require the initial breeders' authorization, particularly if India follows UPOV's broad view on what processes create essentially derived varieties. In the content of the protected variety could require the initial breeders' authorization, particularly if India follows upon the content of the protected varieties.

VI. Public Interest Protection

PPVFR includes clauses that exclude certain varieties from protection because of public interest, and gives an option for a compulsory license if the public interest is not fulfilled.⁷⁶ Registration of a variety is not allowed under PPVFR where prevention of commercial exploitation of the variety is necessary to "protect public order or public morality or human, animal and plant life and health or to avoid serious prejudice to the environment."⁷⁷

Moreover, a compulsory license can be granted to any person who applies three years after a certificate of registration has been granted, and proves that "the reasonable requirements of the public for seeds or other propagation material of the variety have not been satisfied or that

⁷² PPVFR § 30.

⁷³ *Id*.

⁷⁴ *Id*.

⁷⁵ Sahai, *supra* note 3, at 408.

⁷⁶ *Id.* at 410.

⁷⁷ PPVFR § 29(1).

the seed or other propagating material of the variety is not available to the public at a reasonable price."⁷⁸ Once granted a compulsory license, the applicant has authority to undertake production, distribution, and sale of the variety.⁷⁹ Breeders, however, may make a written request and submit any reasonable factor to explain why they cannot produce the variety on a commercial scale to an adequate extent.⁸⁰

VII. Central Government and State Government Rights

While the initial breeder is given exclusive rights to extant varieties, these rights are only available when the breeder claims the right. The breeder must register for protection within in a specified period, which is to be determined by the Authority.⁸¹ When breeders do not establish their right to the variety, the Central Government and, in certain cases,⁸² the State Government will be deemed to be the owner of the right.⁸³ PPVFR is unclear on what the Government is to do with its ownership. Perhaps, the ownership is for the public domain, but this question is unsettled.

VIII. Union for the Protection of New Plant Varieties - The Future for India?

Although PPVFR is currently effective, the future of India's plant variety protection may soon be changing if the country becomes a member of the Union for the Protection of New Plant Varieties (UPOV) convention.

⁷⁸ *Id.* § 47(1).

⁷⁹ *Id*

⁸⁰ *Id.* § 49(1). The breeder's request is to be submitted to the Authority. If the Authority finds that the breeders' grounds for noncompliance is reasonable, the Authority may adjourn the hearing of the compulsory license application for a period not exceeding twelve (12) months as the Authority may consider sufficient for optimum production of the variety by the breeder. *Id.* ⁸¹ *Id.* § 15(2).

⁸² The State Government is granted ownership of the right where the extant variety is notified for a State or for any area under section 5 of the Seeds Act, 1966. *Id.* § 28(1).

UPOV is an international forum set up to recognize plant breeders' rights globally.⁸⁴ The intergovernmental organization was created in 1961⁸⁵ for the protection of new plant varieties by an intellectual property right.86 UPOV seeks plant variety protection "with the aim of encouraging breeders to develop new varieties of plants."87

Although India has not yet joined the UPOV convention, 88 India's Union Cabinet approved the decision to join on May 31, 2002,89 and the country has applied to become a member under the 1978 Act of the UPOV convention. Adoption of the UPOV Act will greatly affect the plant protection laws in India,⁹¹ because UPOV does not make reference to farmers' rights. 92 Becoming UPOV compatible will require India to undo the protections that PPVFR provides for farmers.93

UPOV only gives rights to breeders.⁹⁴ Any additional "rights" to other groups, such as farmers and researchers, are privileges to the groups in the form of exemptions from the sole

⁸⁴ Response, supra note 60. There are other international treaties in addition to UPOV, including the Convention on Biological Diversity (which acknowledges the rights of rural communities) and the International Treaty of Plant Genetic Resources (which binds governments to implement farmers' rights). India is a member of both treaties. *Id*. ⁸⁵ UPOV was adopted on December 2, 1961.

⁸⁶ International Union for the Protection of New Varieties of Plants, Welcome, at http://www.upov.int/ (last visited Feb. 13, 2004).

⁸⁷International Union for the Protection of New Varieties of Plants, About UPOV: Introduction, at http://www.upov.int/en/about/introduction.htm (last visited Feb. 12, 2004).

⁸⁸ India has not become a member of UPOV as of January 15, 2004. States Party to the International Convention for the Protection of New Varieties of Plants, (Jan. 15, 2004), at http://www.upov.int/en/about/members/pdf/423 jan 2004.pdf.

⁸⁹ Gene Campaign Moves Delhi High Court to Protect Farmers' Rights, AGBIOINDIA, Oct. 2, 2002, available at http://www.mindfully.org/wto/upov-farmers-rights10oct02.htm (last visited June 7, 2004) [hereinafter Gene Campaign].

⁹⁰ UPOV has been revised three separate times, making a 1972 Act, a 1978 Act, and a 1991 Act. After 1995, the only act presumably available to join is the 1991 Act. Response, supra note 60; India, however, applied to join the 1978 Act (which allows farmers to save and exchange seed for the next growing season, as opposed to the 1991 version which does not); Khalilur Rahman, Protecting Plant Varieties and Farmers' Rights, DAILY STAR, May 9,

http://www.sustain.org/biotech/library/admin/uploadedfiles/Protecting Plant Varieties and Farmers Rights.htm.

⁹¹ Commentators on the subject have concluded that PPVFR and UPOV cannot co-exist. See Krishnan, supra note 5; Gene Campaign, supra note 89; Response supra, note 60. ⁹² Response supra, note 60.

⁹³ *Id*.

⁹⁴ *Id*.

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breeders' right.⁹⁵ These exemptions are available to farmers or researchers, but are given "within reasonable limits and subject to safeguarding of the legitimate interests of the breeder."96 For example, PPVFR gives a right to farmers to sell seed under another denomination.⁹⁷ Under UPOV, however, a variety containing a denomination must always be sold under that denomination.98

According to Gene Campaign, an Indian Nongovernment Organization, the only right that could be given to Indian farmers if the country adopted UPOV would be an exemption allowing the use of a saved variety from the farmers' previous harvest for replanting in the farmers' own lands. 99 Even then, Gene Campaign contends, the exemption would not be automatic; rather, the farmers would have to negotiate for the right. 100

In October 2002, 101 the Council of UPOV started, but "has not yet finished," an examination of PPVFR conformity with the 1978 Act of UPOV. 102 The Council of UPOV cited a need for "further clarification" concerning PPVFR and its implementing regulations. 103 UPOV has not given a position on PPVFR's conformity with the UPOV convention, but UPOV is in contact with the Indian Government to "clarify certain questions." 104

Another potential obstacle that could prohibit India from joining the UPOV convention is the verdict from a Public Interest Litigation (PIL), which has been filed in the Delhi High Court

⁹⁶ Id. (citing the Union for the Protection of New Plant Varieties).

⁹⁷ PPVFR § 39(1)(iv); see Le Buanec, supra note 62.

⁹⁹ Id. (citing the Union for the Protection of New Plant Varieties).

¹⁰¹ International Union for the Protection of New Varieties of Plants, Annual Report for the Secretary-General for 2002 3 (Oct. 23, 2003), at http://www.upov.int/en/documents/c/37/c 37 2.pdf [hereinafter International].

¹⁰² Rolf Jördens, Remarks at WIPO-UPOV Symposium on Intellectual Property Rights in Plant Biotechnology 8 (Oct. 24, 2003), at http://www.upov.int/en/documents/Symposium2003/panel_discussion.pdf.

¹⁰³ International, supra note 101.

¹⁰⁴ Jördens, supra note 102.

the Constitution of India. 109

in India.¹⁰⁵ The Gene Campaign has asked the court to restrict the government from joining the UPOV convention.¹⁰⁶ The petitioners have prayed to the Court that the decision to join UPOV is illegal, pointing to Section 86 of PPVFR that states "the provisions of this Act shall be binding on the Government," and also that the decision is unconstitutional, violating six Articles of

In April 2003, the Indian Government replied to the PIL stating, "there is sufficient scope within the provision of the [UPOV] convention . . . to construe while balancing the rights of the farmers." The petitioners filed a rejoinder to the government's reply and asked the Court "to direct the [Government of India] to provide an undertaking that no step that it takes will in anyway dilute the rights granted to farmers in the Indian law." The PIL has been listed for final arguments in March 2004. There is no information publicly available on the Indian Government's current stand and the Government has not moved further on the issue.

IX. Conclusion

The Protection of Plant Varieties and Farmers Rights Act's extension of rights to both breeders and farmers gives unique obstacles to breeders wishing to supply plant varieties to

¹⁰⁵ Gene Campaign filed the PIL October 7, 2002. *Farmers Rights in Jeopardy*, AGBIOINDIA, Oct. 2, 2002, *at* http://www.agbioindia.org/archive_m.asp?id=100&mo=10&yr=2002.

Response supra, note 60.

¹⁰⁷ PPVFR § 86.

¹⁰⁸ The Articles include 14, 21, 38, 47, 48, and 48-A. These Articles "guarantee the freedom of citizens and their right to secure livelihoods." *Gene Campaign*, *supra* note 89.

¹¹⁰ Email from Ujjwal Kumar, Policy Analyst, Gene Campaign, to Robyn Ott (Feb. 8, 2004, 1:59) (on file with author).

¹¹¹ *Id*.

¹¹² *Id*.

¹¹³ *Id*.

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India, and innovative opportunities to the farmers and citizens of India. The pending decisions facing the Indian Government could result in dramatic consequences to each of these groups.