



**PROTECTION OF PLANT
VARIETIES AND FARMERS'
RIGHTS ACT**

PLANT VARIETY PROTECTION AND THE PURPOSE

- Plant variety protection provides legal protection of a plant variety to a breeder in the form of Plant breeder's rights.
- Plant Breeder's Rights are intellectual property rights that provide exclusive rights to a breeder of the registered variety.



THE PLANT VARIETY PROTECTION AND FARMERS RIGHTS ACT 2001

- a sui generis system, is an attempt by the Indian Government to recognize and protect the rights of both commercial plant breeders and farmers in respect of their contribution made in conserving, improving and making available plant genetic resources for development of new plant varieties and to encourage the development of new plants varieties.
- Protection of the plant varieties under the Act accelerates agricultural development and stimulates investment for research and development for the development of new plant varieties which in turn facilitates the growth of the seed industry and ensures the availability of high quality seeds and plant material to the farmers.

WHY PROTECTION FOR PLANTS IS REQUIRED IN INDIA?

- The Agreement on TRIPS requires WTO members to introduce an “effective system” for the protection of plant varieties. Article 27 (3) of the TRIPS agreement reads
- Member countries may exclude
“plants and animals other than micro-organisms and essentially biological processes for the production of plants and animals other than non- biological and microbiological processes. 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.
- India is among the first countries in the world to have passed legislation granting Farmers' Rights in the form of the Protection of Plant Varieties and Farmers' Rights Act, 2001(PPVFR).
- Nine rights are given to farmers under the Act including: the rights to save, exchange and (to a limited extent) sell seeds and propagating material, to register varieties, to recognition and reward for conservation of varieties, to benefit sharing, to information about expected performance of a variety, compensation for failure of variety to perform, availability of seeds of registered variety, free services for registration, conducting tests on varieties, legal claims under the Act, and protection from infringement.


PLANT VARIETY

- A variety is a plant grouping within a single botanical taxon of the lowest known rank, defined by the expression of the characteristics resulting from a given genotype or combination of genotypes. The variety should be distinguished from other plant grouping by expression and should be considered as a unit with regard to its suitability for being propagated unchanged.

REGISTERABLE PLANT VARIETIES IN INDIA

- New Varieties: A Variety which is not in public domain in India earlier than one year before the date of filing or outside India, in the case of trees or vines earlier than six years or in any other case earlier than four years.
- Extant Variety: A Variety which is notified under Seed Act, 1966 or a variety about which there is common knowledge or a farmer's variety or any other variety which is in public domain is considered as an Extant Variety.

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- Farmer's Variety: A Variety which has been traditionally cultivated and evolved by the farmers in their fields or a variety which is a wild relative or land race of a variety about which farmers possess common knowledge.
 - Essentially Derived Variety (EDV):
 - i) Predominantly derived from such initial variety, or from a variety that itself is predominantly derived from such initial variety, while retaining the expression of the essential characteristics that result from the genotype or combination of genotypes of such initial variety.
 - ii) Is clearly distinguishable from such initial variety; and
 - iii) Conforms to such initial variety in the expression of the essential characteristics

NON-REGISTERABLE PLANT VARIETIES IN INDIA

- All plant varieties cannot get legal protection in India. Certain Plant varieties are excluded from the protection under PPVFR Act 2001. Any variety where prevention of commercial exploitation of such 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 or any varieties which has terminator technology or any variety belonging to the species or genera which is not listed in the notification issued by the Central Government cannot be registered for the protection under the Act.

CRITERIA FOR PROTECTING A PLANT VARIETY

The plant variety must be:

- Distinct: A variety should be clearly distinguishable by at least one essential characteristic from existing or commonly known varieties in any country at the time of filing of the application.
- Uniform: A Variety must be sufficiently uniform in its essential characteristics.
- Stable: Essential characteristics of a variety must be stable after repeated propagation or in the case of a particular cycle of propagation at the end of each cycle.

WHO CAN APPLY FOR THE REGISTRATION OF A PLANT VARIETY?

- any person claiming to be the breeder of the variety;
- any successor of the breeder of the variety;
- any person being the Assignee or the breeder of the variety in respect of the right to make such application;
- any farmer or group of farmers or community of farmers claiming to be the breeder of the variety;
- any person authorized to make application on behalf of farmers; and
- any university or publicly funded agricultural institution claiming to be the breeder of the variety.

WHERE TO FILE THE APPLICATION FOR THE REGISTRATION OF A PLANT VARIETY?

- For the purposes of Protection of Plant Varieties and Farmers Right Act, 2001 Protection of Plant Varieties and Farmers Right Authority was established in October 2005 and its Head Quarters is located at NASC Complex, DPS Marg, Opp-Todapur, New Delhi – 110012.
- Any information regarding protection, application, fee structure etc can be obtained from the office or at

<http://www.Plantauthority.gov.in/>

PREREQUISITES FOR FILING AN APPLICATION FORM FOR REGISTRATION OF PLANT VARIETY OF PLANT VARIETY

- ❑ Denomination assigned to such variety
- ❑ An affidavit that variety does not contain any gene or gene sequence involving terminator technology
- ❑ Complete passport data of parental lines with its geographical location in India and all such information relating to the contribution if any, of any farmer(s) village, community, institution etc in breeding and developing the variety
- ❑ Characteristics of variety with description of Novelty, Distinctiveness, Uniformity and Stability
- ❑ A declaration that the genetic material used for breeding of such variety has been lawfully acquired
- ❑ A breeder or other person making application for registration shall disclose the use of genetic material conserved by any tribal or rural families for improvement of such variety

DEPOSITION OF SEED OR PROPAGATING MATERIAL BEFORE REGISTRATION

- Deposition of seeds is necessary for DUS test conducted by PPV & FR authority. The applicant needs to deposit the fixed amount of seed or propagating material with prescribed germination percentage and physical purity along with the seed quality test report to the authority.

DURATION OF PROTECTION FOR A REGISTERED PLANT VARIETY

- Trees and Vines: 18 Years
- Other crops: 15 Years.
- Extant Varieties: 15 Years from the date of notification of that variety by the Central Government under Seed Act, 1966.

EXEMPTIONS PROVIDED UNDER THE ACT

- Farmers Exemption: Farmer shall be entitled to produce, save, use, sow, re-sow, exchange, share or sell his farm produce including seed of a variety protected under this Act.
- Researchers Exemption: Researchers are allowed to (i) use the registered variety for conducting experiment (ii) use the variety as an initial source of variety for the purpose of creating other varieties.

PLANTS THAT ARE COVERED UNDER THE PPVFR ACT

- As of now following 18 plant species can be registered under the Act.
- Cereals: Rice, Wheat, Maize, Sorghum, Pearl Millet.
- Legumes: Chickpea, Mungbean, Urdbean, Field Pea, Rajmash, Lentil, Pigeon Pea.
- Fibre Crop:
- Four species of cotton namely *Gossypium Arboreum* L. and *G. Herbaceum* L. (Diploid Cotton) and *G. Barbadosense* L. and *G. Hirsutum* L. (Tertaploid Cotton)
- Two species of Jute (*Corchorus Olitorius* L. and *C. Capsularis* L.)




THE RIGHTS ENJOYED BY THE OWNER OF VARIETY/BREEDER'S RIGHTS

The owner of the protected variety has the following rights

- a. To produce
- b. To Sell
- c. To market
- d. To distribute
- e. To import and
- f. To export the variety.



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- The knowledge of the indigenous people and the traditional farmers has made a significant contribution in the development of new crop types and biodiversity conservation.
 - Monsanto sued farmers for re-sowing GM seed62: Monsanto Company is suing dozens of American and Canadian farmers for infringement of its patent on genetically modified (GM) crops. Investigators hired by the company keeps an eye on the farmers and collect evidence of the illegal planting of the Monsanto's GM crops of cotton, maize, rapeseed and soybean. Farmers who used Monsanto's crops to produce seed for planting have been fined thousand of dollars for patent infringement and some face bankruptcy. The company also advertises a toll-free- telephone number for people to inform on farmers who use unlicensed seed.

□ BENEFIT SHARING

The Plant Variety Act of India has benefit sharing mechanisms which requires sharing the benefits arising from commercialization of traditional knowledge. The bio-diversity has a great economic value and hence need to be conserved. Unless there is adequate incentive for conserving the bio diversity for future generations, there will be genetic erosion that will ultimately be detrimental to the interests of the society.

□ Case Study of Jeevani: the Miracle Drug

The drug Jeevani is developed from the perennial plant Arogyapaacha. Four patent applications were filed on Jeevani. The technology was then licensed to the Arya Vaidya Pharmacy Ltd. an Indian pharmaceutical manufacturer pursuing the commercialization of ayurvedic herbal formulations. A trust was established to share the benefits arising from the commercialization of the traditional knowledge based drug called „Jeevani“. The rationale attributed being, if the local communities had not conserved the biodiversity, the probability of scientists making any selection at all would have been remote or nil.



THANK YOU