

## Protection of Plant Varieties and Farmer's Rights Act

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### SUMMARY

India has adopted the protection of plant varieties in 2001. The main objective of the Protection of Plant Varieties and Farmers' Rights (PPV&FR) Act, 2001 is the development of seed industry by protecting interest of the breeders, seed agencies and farmers by providing an effective mechanism for protection of plant varieties and rights of the farmers.

### INTRODUCTION

Breeding of new plant varieties and supply of seeds were mainly in public domain until the 1970s when organized seed sector was taking shape in India (Spielman *et al.*, 2011). The diversification process was noticed across the different stages of the seed system, viz., development of plant varieties and multiplication and distribution of seeds (Morris *et al.*, 1998). However, private seed companies have shown interest in developing low-volume and high-value seed, such as those of vegetables, cotton, sunflower, maize or other hybrid dominated crops (Anonymous, 2012). Since most of these companies were using public material, protection was not a major issue and wherever needed biological protection provided by hybrids was adequate. Therefore, India has adopted the protection of plant varieties in 2001. The Protection of Plant Variety and Farmers Right Act, 2001 (PPVFR Act) is an Act of the Parliament of India that was enacted to provide for the establishment of an effective system for protection of plant varieties, the rights of farmers and plant breeders, and to encourage the development and cultivation of new varieties of plants. This act received the assent of the President of India on the October 30, 2001.

### Intellectual Property Rights

Intellectual property is the product of the human intellect including creativity concepts, inventions, industrial models, trademarks, songs, literature, symbols, names, brands, etc. Intellectual Property Rights do not differ from other property rights. They also entitle him/her to prevent others from using, dealing or tampering with his/her product without prior permission from him/her. He/she can in fact legally sue them and force them to stop and compensate for any damages.

### Protection of Intellectual Property Rights

Protection of IPR allows the innovator, brand owner, patent holder and copyright holder to benefit from his/her work, labor and investment, which does not mean monopoly of the intellect. Such rights are set out in the International Declaration of Human Rights, which provides for the right to benefit from the protection of the moral and physical interests resulting from the right holder's work; literal or artistic product.

### Need for Enacting the PPVFR Act

- To protect IPR associated in the process of development of new plant varieties.
- Recognize the contributions of the farmers - in conserving, improving and development of new plant varieties.
- To ensure availability of high quality seeds and planting material - to farmers by establishment of new seed industries.

### Objectives

- To provide an effective system for protection of plant varieties and rights of farmers, plant breeders and researchers.
- To protect plant breeders' rights and to stimulate investment for Research & Development and evolution of new varieties.

- To recognize the farmers in respect of their contributions made for conserving, improving and making available plant genetic resources for development of new plant varieties. To facilitate the growth of seed industry to ensure production and availability of high quality seeds and planting material to the farmers.

### Functions

- Encourage the development of new varieties of plants and to protect the rights of the farmers and the plant breeders.
- Establishment of National Gene bank for orthodox seed and field gene bank for perennial crops. Registration of new and extant varieties of plants.
- Developing characterization and documentation of registered plant varieties.
- Documentation, indexing and cataloguing of farmers varieties.
- Compulsory cataloguing facility for all varieties of plants.
- Ensuring seeds of varieties registered under the Act are available to farmers and providing for compulsory license, if needs arise.
- Ensuring maintenance of National Register of plant varieties.
- Utilization of Gene Fund for supporting the conservation and sustainable use of plant genetic resources and capacity building of the panchayats in carryings out such conservation and sustainable use and meeting the expenditure of the schemes relating to benefits sharing and compensations to the stakeholders.

### Reasons to Register the Varieties:

- Registration of farmer's varieties are totally free.
- To establish intellectual property rights of farmers on their varieties for harnessing commercial potential of farmers varieties.
- For establishing ownership on farmer's varieties. Safeguarding farmer's varieties from piracy.

### Types of Plant Varieties

**Farmers' varieties:** Farmers' varieties are those traditional varieties developed and conserved by farmers.

**Extant varieties:** Are those varieties in existence which are bred by public and private institutions and released for cultivation by state or central variety released committee within last 15 years and also farmers' varieties or other varieties in public domain.

**New varieties:** Are those recently developed varieties, which are either breed by scientist breeder or by farmers.

**Essentially derived variety (EDV):** Accordingly under UPOV 1991, predominantly derived from the initial variety itself. Fulfils the normal protection criteria of novelty, distinctness, uniformity and stability. Cannot be exploited without the authorization of the breeder of the protected variety.

### Rights under This Act:

#### Breeder's Right:

**Plant breeders' rights (PBR)**, also known as **plant variety rights (PVR)**, are rights granted to the breeder of a new variety of plant that give the breeder exclusive control over the propagating material (including seed, cuttings, divisions, tissue culture) and harvested material (cut flowers, fruit, foliage) of a new variety for a number of years. In order to qualify for these exclusive rights, a variety must be new, distinct, uniform and stable.

- **New** if it has not been commercialized for more than one year in the country of protection.
- **Distinct** if it differs from all other known varieties by one or more important botanical characteristics, such as height, maturity, colour, etc.
- **Uniform** if the plant characteristics are consistent from plant to plant within the variety.
- **Stable** if the plant characteristics are genetically fixed and therefore remain the same from generation to generation, or after a cycle of reproduction in the case of hybrid varieties.

**Researcher Right:**

- Researcher can use any of the registered variety under the Act for conducting experiment or research.
- It states that Registered varieties can be used for research or experiments as initial source as a variety for purpose of creating other varieties but repeated use needs prior permission of the registered breeder.

**Farmer Right:**

- A farmer who has evolved or developed a new variety is entitled for registration and protection in like manner as a breeder of a variety, it can also be registered as an extant variety;
- A farmer can save, use, sow, re-sow, exchange, share or sell his farm produce including seed of a variety protected under the PPV&FR Act, 2001 in the same manner as he was entitled before the coming into force of this Act provided farmer shall not be entitled to sell branded seed of a variety protected under the PPV&FR Act, 2001; Farmers are eligible for recognition and rewards for the conservation of Plant Genetic Resources of land races and wild relatives of economic plants;
- There is also a provision for compensation to the farmers for non-performance of variety under Section 39 (2) of the Act, 2001. Farmer shall not be liable to pay any fee in any proceeding before the Authority or Registrar or the Tribunal or the High Court under the Act.

**Who can register for plant variety?**

Any person claiming to be of the variety. Any farmer or group of farmers or community of farmers claiming to be 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 breeder of the variety.

**Eligibility Criteria for Registration**

- **Novel:** Before registration the propagating or harvested material of such a variety has not been sold, disposed by breeder or his successor for the purpose of exploitation of such variety.
- **Distinct:** If it is clearly distinguishable by at least one essential characteristic from any other variety.
- **Uniform:** If subject to the variation that may be expected from the particular features of its propagation, it is sufficiently uniform in its essential characteristics Stable: If it's essential characteristics remain unchanged after repeated propagation or, in the case of a particular cycle of propagation, at the end of each such cycle.

**Registration of Plant Variety**

- A variety is eligible for registration under the Act if it essentially fulfils the criteria of Distinctiveness, Uniformity and Stability (DUS).
- The Central Government issues notification in official Gazettes specifying the genera and species for the purpose of registration of varieties.
- So far, the Central Government has notified 107 crop species for New Plant varieties and 114 crop species for Extant Notified varieties for the purpose of registration. The PPV&FR Authority has developed "Guidelines for the Conduct of Species Specific Distinctiveness, Uniformity and Stability," tests or "Specific Guidelines", for individual crop species.

**Procedure for Registration**

1	Notification of guidelines	9	Accepted / rejected for novelty and DUS
2	Filling of applications by applicant	10	Publish in PVJ for pre- grant opposition
3	Registration fees, DUS fees	11	Registration grant
4	Internal scrutiny	12	Entry in national register
5	Application accepted/ rejected	13	Publish in PVL for benefit sharing
6	Seed deposit	14	Annual / renewal fee
7	DUS test	15	Surrender / revocation
8	Analysis	16	Compulsory licensing/ benefit sharing

**The list of DUS test Centres:**

These centres have been identified provisionally for the DUS Testing by the Authority.

VEGETABLES	DUS Test Centres		
	Crop	I	II
Tomato	IIVR, Varanasi	IIHR, Bangalore	
Brinjal	IIVR, Varanasi	IIHR, Bangalore	
Okra	IIVR, Varanasi	IIHR, Bangalore	
Cauliflower	IIVR, Varanasi	IARI, Katrain	
Cabbage	IIVR, Varanasi	IARI, Katrain	IARI, New Delhi
Potato	CPRI, Shimla	CPRS, Modipuram	CPRS, Jalandhar
Onion	DOGR, Pune	IARI, New Delhi	
Garlic	DOGR, Pune	IARI, New Delhi	
Pea(Vegetable)	IIVR, Varanasi	IIHR, Bangalore	

SPICES	DUS Test Centres(Proposed)	
	Crop	I
Turmeric	IISR, Calicut	ICAR-NEH,Barapani
Ginger	IISR, Calicut	ICAR-NEH,Barapani
Black Pepper	IISR, Calicut	-
Coriander	NRCSS,Ajmer	DMARP,Anand
Small Cardamom	IISR, Calicut	ICRI,Mylandumpara

FRUIT CROP	DUS Test Centres		
	Crop	I	II
Mango	CISH,Lucknow	IIHR,Bangalore	RFRS,Sindhudurg

**CONCLUSION**

The objectives of PPV & FR Act is to protect plant varieties and farmers rights as stated in the title of the act. The conversion ratio for farmers' varieties should increase considerably in the years to come from the present value to justify the objectives of the act. In this context there is a need to support technology based Entrepreneurship in agriculture. Alongside, scientific studies must be undertaken to determine whether the current law is truly appropriate to encourage informal farmland innovation by individual farmers who do not have access to modern scientific Research and Development technology.

**REFERENCE**

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