

# PPVFR Act: The way forward for IPR protection of plant varieties

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several key managerial positions such as CEO Delta Agrigenetics, COO of SeedWorks, Seed Operations-Head in Nunhems and Seed Quality Lead in Pioneer, etc. He is currently the President, Seedsman Association, Hyderabad, one of the oldest industry association in India. He is also serving as the General Secretary of the National Seed Association of India (NSAI) and has been and a champion of industry and farmer issues.

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India is mainly an agricultural country and rich in its biological diversity. Agriculture sector provides livelihood to 65-70 percent of the total population. Our farmers toil day and night in the fields to feed our population. Seed is the primary agriculture-input which encapsulates the genetic potential of the crop plant that emerges out of it and upon which, all other inputs and farmers efforts are invested. The Indian families depend on agriculture not only for their livelihood, but because agriculture has become a way of life in India, playing a dominant role in Indian economy.

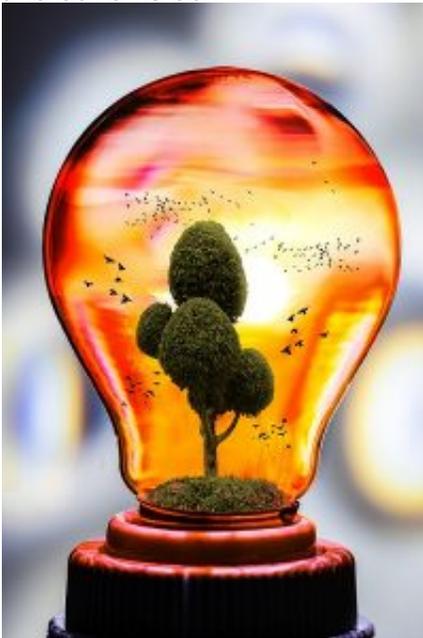
In this background, an IPR law, covering plants, varieties and seeds, must be a balanced Act, protecting the interest of all the stakeholders. India, having ratified the Trade Related Intellectual Property Rights (TRIPS) Agreement, was obliged to give effect to its sub-para (b) of para 3 of article 27 to provide protection to plant and varieties. India, in view of the importance of agriculture in the Indian context, opted for a *sui generis* (of a special kind or unique to a particular context) system for providing protection to plants, varieties and seeds, enacted the Protection of Plant Varieties and Farmers' Rights Act, 2001 (PPVFR Act).

**Spotting the difference!**

This is a unique legislation, which, by providing protection to plant varieties and farmers' and breeder's rights, stimulates investment in research and development and creation of new varieties and facilitates growth of the seed industry to ensure the availability of high quality seeds and planting material to the farmers.

India, after having provided protection for plants and varieties under the PPVFR Act, amended the Patents Act, 1970 in 2002 to keep plants and their parts thereof, plant varieties and seeds outside the scope of the Patents Act. By an amendment in 2002, inter alia, clause (c) Section 3 was amended and clause (j) was incorporated under Section 3. By these amendments, "discovery of any living thing or non-living substances occurring in the nature" and "plants and animals in whole or any part thereof other than micro-organisms but including seeds, varieties and species and essentially biological processes for production or propagation of plants and animals are not inventions within the meaning of the Patents Act." As per Section 3(h), a method of agriculture or horticulture is also not an invention.

So, there is no ambiguity on the pertinent legislation for protection of Intellectual Property Rights (IPR) for Plant varieties in India. Therefore, the Patents Act and the PPVFR Act operate in two different fields and patent act is not relevant provision for IPR protection to processes and products related to plant varieties and seeds which are produced through essential biological processes (sexual crossing by pollination or plant breeding process) to produce them.



**“This is a unique legislation, which, by providing protection to plant varieties and farmers’ and breeder’s rights, stimulates investment in R&D and creation of new varieties and facilitates growth of the seed industry”**

### **Understanding the law in context of transgenics**

**A patent provides a right to the patentee to stop others use his patented process or product and also provides monopoly rights on its use. For example, if the patented product, say patented gene sequence, is incorporated in the plant by using a patented process, it gets integrated with the plant and results in a transgenic plant expressing transgenic trait. Transgenic plant varieties get protection only under the PPVFR Act as plant varieties and seeds of such plant varieties are excluded items in Patents Act, 1970.**

**With the amendment of Section 3(c) and incorporation of 3(j) in the Patents Act in 2002, the plant, varieties and seeds including transgenics have gone out of the purview of the Patents Act. They get IPR protection only under the PPVFR Act. However, the interest of the patentee, who contributed for development of a transgenic trait, is protected under the PPVFR Act and the patentee can make his claim for benefit sharing from all the breeders whose varieties express the trait, through the PPVFR Authority, which is a statutory body vested with the powers to determine the benefit sharing amount based on the commercial value, the said transgenic trait conferred to the new variety. By vesting the powers in the PPVFR Authority to determine the benefit share, creation of monopoly in agriculture is prevented.**

**In this manner, there is adequate protection given to a transgenic trait in the Act. Any transgenic variety will contain several agronomical traits like yield potential, fibre quality or resistance to other pests and diseases, tolerance to abiotic stresses like drought, etc., apart**

from the transgenic trait. A patentee for a method of production of transgenic plant for one or two particular traits therefore cannot be allowed to restrict the use of all traits in a transgenic plant variety developed by the breeder or Seed Company, on the basis of such one or two transgenic traits. That way, by incorporating one patented gene sequence across all the varieties of a crop, the patentee can claim patent rights in all the varieties, which would be catastrophic to the Indian agriculture. Also, such paradigm of primacy to the transgenic trait also undermines the Plant breeding efforts by Breeders, Indian public sector and private sector and farmers who also breed and conserve genetic diversity.

### **Balanced framework**

Further, it is also to be noted that by virtue of the overriding effect over any other law as provided under Section 92, the provisions of PPVFR Act shall prevail over the Patents Act. Therefore, in the light of the exclusion of plants, varieties and seeds from the Patents Act, the patentee has the only option of making claim for benefit sharing under the PPVFR Act. By adopting the PPVFR mechanism which provides for a balanced framework, clear cut distinction can be achieved between IPR protection, regulatory process for biosafety and commercialization of transgenic traits.

The Central Government has established the PPVFR Authority for implementation of the PPVFR Act. In all the proceedings before the PPVFR Authority or the Registrar, it has all the powers of a civil court for the purposes of receiving evidence, administering oaths, enforcing the attendance of witnesses etc. The Authority can also recover the benefit share from the breeders, if required, using Subsection (7) of Section 26 of the PPVFR Act as an arrear of land revenue by referring to the District Magistrate within whose local limits of jurisdiction the breeder liable for such benefit sharing resides.

Firstly, the trait developers' rights are protected under Section 26 "Determination of benefit sharing by Authority", under which a developer can claim benefit sharing on its trait used in a plant variety. "Benefit sharing" is legally defined under the PPVFR Act, unlike a loosely used term "trait value".

The PPVFR act is one of its special kind in the world enacted for protecting Indian interests. It is also unique with respect to the benefit sharing mechanism with power to authority to moderate for enabling reasonable and affordable benefits to all stakeholders based on their respective contributions.

Under Section 28 "Registration to confer right", breeder's rights (breeder definition in the Act includes farmer) are protected. Under Section 30 "Researcher's rights", any person including a farmer or a breeder can use any variety, registered under the PPVFR Act, for conducting experiment or research or for creating new varieties. However, if a registered variety is required to be used repeatedly, as a parent line, for commercial production of the newly developed variety, authorization of the breeder of the registered variety shall be required. As under conventional breeding, there is one time use of a transgenic variety for development of a new transgenic variety, authorization shall not be required.

Apart from the rights available to farmers under Sections 28 and 30, mentioned above, farmers have also specific rights under Section 39. They are entitled for registration and protection of their varieties under the PPVFR Act. They are also entitled to save, use, sow, resow, exchange, share or sell his farm saved seed of a variety protected under the PPVFR Act.

**Therefore, the PPVFR Act is harmonious amalgamation of rights of all stakeholders in the Indian context.**