



Intellectual Property Rights of Agriculture Context in India

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Two types of intellectual property rights (IPRs) play a key role in plant breeding; plant breeders' rights (PBRs), established between 1900 and 1950 and patent rights, emerged with the rise of modern biotechnology. IPRs can be seen as constituting a contract between the "inventor" and society. In return for "disclosure" of the invention, the IPR owner receives the exclusive right to market the invented product for a defined period (usually 20- 30 years), allowing them to obtain returns on his/her investment. Others can make use of the public description of the product and the manufacturing process to develop their products. Plant breeders consider the use of IPRs as a viable return on investment and as a prerequisite for continued investments in plant breeding.

There are two broad categories of IPRs: (i) IPRs covering industrial property such as patents, trademarks, geographical indications and industrial designs; (ii) copyright and related rights covering artistic and literary works, performances, broadcasts and the like. IPRs which not fall into this classical division are termed sui generis, meaning one-of-itskind. Such sui generis rights include those covering plant breeders' rights and layout designs of semiconductor chips.

Role of IPR's and PBR's in Indian agriculture context- overview

Intellectual Property

- Intellectual property is an idea, a design, an invention etc that can ultimately create a useful product/ program.
- Developing such intellectual property, requires innovativeness, intellectual inputs, considerable monetary and other resources. Therefore, the inventor like to ensure a fair reward for his invention.
- But the main problem with intellectual property is that it can be copied replicated or redesigned, this reduces the return to the original inventor.
- The right to an invention to obtain economic benefits for his invention/ intellectual property is called IPR.
- The IPR however is recognized by the government only so long as it is no detriment to society.

Seven IP Forms

- Patents
- Plant Variety protection or Plant Breeders' Rights
- Copyrights
- Geographical Indications
- Trademarks

- Layout designs for integrated circuits
- Trade secrets

I. Patents

A Patent is a right granted by a government to an inventor to exclude others from imitating, manufacturing, use or selling the invention in question for commercial use for a specified period.

Patent Requirement: To grant a patent the main requirements are as follows

- Novelty
- Inventiveness
- Industrial application & usefulness
- Patentability
- Disclosure

II. Plant Breeder Rights

PBR are the rights granted to plant breeders by the government, or owner of a variety to exclude others from commercially producing that variety or the propagating material for 15-20 years.

III. Copyright

Some intellectual properties can't be patentable. They are protected by copyright & are limited in both time and extent. Eg: Books, Videocassettes, Audio & Computer software.

IV. Geographical Indications

- Marks are associated with products originating from a country, region or locality where the quality, reputation or other aspects of the product are determined by its geographical origin.
- Most of the available GIs are related to agricultural products.
- Plant Varieties developed with traditional knowledge and associated with a particular region can be protected as GI

V. Trademark

- A trademark is one or more words, designs or symbols used to distinguish the goods and services of an individual or firm from those of others in the marketplace.
- Identified by the symbols ® and ™.
- Registration time: 10 years (can be Renewable indefinitely).
- Eg: Coco Cola®, Nike®, IBM and McDonalds®

VI. Trade secret

- When the individual/organization holding an intellectual property does not disclose the property to anyone and keeps it as a closely protected secret to promote his business interests, it is called trade secrets.
- A trade secret may be related to formulae, processors, parented lines in hybrids, in biotechnology trade secrets include cell lines, microorganism strains etc.

IPRs & PBRs in Indian agricultural scenario

Several of the above IPRs are important in the agricultural sector because they can be used to protect goods or services produced in the agricultural sector. These are primarily patents, plant breeders' rights, trademarks, geographical indications and trade secrets. It is possible to include layout designs of chips designed to perform specific agricultural-related tasks, but this is thought to be incorporated into machinery manufactured in the industrial sector.

Patents are probably the most important IPR today in agricultural goods and services as it provides the strongest protection of patentable plants and animals and biotechnological processes for their production, wherever these are available

- Patents universally give the patentee the right to prevent third parties from using, making, selling the patented process or product. Patents, however, must be disclosed to the public through patent documents.
- This enables researchers to develop additional useful products or services. Patentable products must meet the criteria of patentability, novelty, i.e. not known in the prior art, nonobviousness that involves an inventive step and usefulness or industrially applicable.
- The biotechnology sector holds the most potential for advances in agriculture to improve productivity. Biotechnology Research & Development is mostly concentrated in the hands of large multinational enterprises. It is in this field of technology more than others, that proprietary rights over knowledge are getting increasingly important.
- Many countries have established plant breeders' rights to reward conventional plant breeding efforts. Such sui generis protection is weaker than patent protection because exploiting the protected material commercially can only prevent third parties by right holders. Such protection encourages breeding efforts in the private sector.
- Marks used in commerce can also be used in both agricultural and industrial products and services. For example, trademarks are used to market seeds or spraying services. An important purpose of a trademark is to distinguish the goods and services of one enterprise from another, thus preventing the deception of the consumer. Such protection prevents the wrongful use of commercial marks and is not limited in time, although registration may need to be renewed from time to time. Almost every country in the world protects trademarks.
- One category of commercial marks more widely used in agriculture than industry are geographical indications, including appellations of origin. Example: 'Basmati' for rice from India.
- Trade secret protection is used by the agricultural sector to protect, for instance, hybrid plant varieties. Thus, even in countries that do not recognize plant breeders' rights, the use of hybrids provides a certain degree of appropriability as long as it can be kept secret.
- Trade secrets may be protected from misuse of third parties through laws relating to unfair competition or restrictive trade procedures or contract law.
- Efforts to introduce plant breeders' rights were made by the private seed companies in India in the late '80s after the adoption of the New Seed Policy in 1988. With this policy, the government of India liberalized the importation of seeds for joint ventures, including hybrid seeds, for many important crops. Liberalization, which includes the development of hybrids, has a positive impact on private research and development in this sector.
- At some conventions in India, the new policies were seen as a victory for multinational enterprises (MNEs) although there were certain conditions regarding the transfer of the parent lines and critical breeding lines to the Indian partner of the joint venture. PVP law aims to promote international trade in agriculture by opening up the developing country markets for hybrids and better-quality plant varieties and helping in reducing the deficit in agriculture practices in these countries.
- Plant variety protection aids in the economic development of the country as it promotes foreign investments by protecting high-risk investments of the foreign breeders. The legal protection afforded by intellectual property rights in the form of plant variety protection provides incentives for the private sector and promotes its involvement in the development of new plant varieties.
- The only solution to the growing problems of "food security" and "loss of agriculture land" in the developing countries is to increase the "productivity per unit area". The PVP law helps in this by promoting research for the development of modified varieties with improved nutritional value.

- The PVP law provides incentives to domestic plant breeders for their innovation and compensates for their investments.

Conclusion

Efforts by public plant breeding programmes to control genetic resources and generate revenue may be counterproductive, so it may use IPRs to make the industry competitive and enhance farmers access to quality seeds and improved varieties. Finally, farmers have little understanding of changing commercial seed markets and the new law makes the situation even more difficult. The government should empower farmers by providing consistent information about their rights, markets, characteristics of crop varieties, etc. Concerted efforts in this way in disciplining seed markets, regulating GE seed and sharpening plant breeding priorities.

References

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