

Protection of Plant Varieties

Lesson 14

KEY CONCEPTS

■ Seed ■ Variety ■ Essentially derived variety ■ Gene Fund ■ Extant variety ■ Farmer's Variety ■ Essential characteristics ■ Farmer ■ Mutation breeding ■ Hybridization ■ Denomination ■ Benefit sharing ■ Compulsory licence

Learning Objectives

To understand:

- The legal framework provided for law regulating and safe guarding the agricultural innovations.
- Plant Varieties and Farmer's Rights Act, 2001 .
- The legal machinery to protect and safe keep the plant varieties and native wealth of plant genetic resources.
- The important definitions and concepts relating to the Act.
- The legal framework pertaining to plant varieties, the rights of farmers and plant breeders and the approaches for encouraging development of new varieties of plants.
- As to how to encourage and recognize and protect the rights of the farmers in respect of their contribution made at any time in conserving, improving and making available plant genetic resources for the development of new plant varieties.

Lesson Outline

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| ➤ Introduction | ➤ Farmers' Rights |
| ➤ Objective | ➤ Compulsory Licence |
| ➤ Protection of Plant Varieties and Farmers' Rights, Authority | ➤ Appeals |
| ➤ Registry | ➤ Infringement, Offences, Penalties and Procedure |
| ➤ Registration of Plant Varieties and Essentially Derived Variety | ➤ International Treaties and Convention |
| ➤ Application for Registration | ➤ Case Laws |
| ➤ Registration of Essentially Derived Variety | ➤ Lesson Round-Up |
| ➤ Duration and Effect of Registration and Benefit Sharing | ➤ Glossary |
| ➤ Surrender and Revocation of Certificate and Correction of Register | ➤ Test Yourself |
| | ➤ List of Further Readings |
| | ➤ Other References (Including Websites / Video Links) |

INTRODUCTION

The legislative and open section organisations in India have focused a lot of attention on rural and agricultural research, particularly the development of novel plant varieties. India didn't have any laws protecting plant varieties before this, and there wasn't really a pressing need. However, such a law had to be passed once India ratified the Trade-Related Aspects of Intellectual Property Rights Agreement (TRIPS) in 1994. According to Article 27(b) of this agreement, the party nations must provide for the insurance of plant assortments to be provided by a patent, a workable *sui generis* framework, or a combination of both.

Agribusiness and agricultural innovation techniques were not made patentable under the present Indian Patent Act, 1970. The rights of reproducers, farmers, and town networks were coordinated, and a *sui generis* framework for insurance of plant varieties was developed to address concerns about the fair distribution of benefits. When compared to other equivalent laws that are either in place or being considered in various countries, it gives flexibility in terms of the genera/species that are insured, the quantity of insurance, and the length of the insurance. Except for microbes, all plant classifications are covered by the Act. Following the implementation of the Act in accordance with the necessary rules and regulations, the gazette will provide information on the general and types of protection assortments.

After India joined the World Trade Organization in 1995 and agreed to implement the Agreement on Trade-Related Aspects of Intellectual Property Rights, discussions on how licenced innovation rights should be presented in Indian horticulture took place, leading to the 2001 enactment of the Protection of Plant Varieties and Farmers' Rights Act.

What is the difference between Patent Act and PPV&FR Act?

Both Acts deal with the IPR of the inventor. The Patent Act of India does not accommodate protection of a plant variety through patenting of a plant or its components or parts. The PPV&FR Act not only protects a plant variety, it also protects the rights of plant breeders and farmers on plant varieties. The protection of a plant variety is granted in the form of registration.

What is the meaning of protection of plant varieties?

The protection on the variety means no one can sell, export, import or produce the seed or propagating materials of such protected (registered) plant variety without the registered breeder's (owner's) permission.

Protection of a plant variety is an intellectual property right that the breeder (who could be an individual, farmer, community of farmers, institution or a government) enjoys over the variety along with its denomination as its owner who is entitled to rights on the variety that shall remain with the breeder till he assigns it to anyone else, for the entire period of protection for the purpose of preventing any other person from making economic benefit from it or from assuming any of the rights to which the breeder is entitled to without the permission of the breeder in whose name the variety is registered.

The protection of the plant variety also means that no one including the registered breeder can sell any other variety with the same denomination or sell the protected variety with any other denomination, commitment of which is also a punishable act of infringement.

OBJECTIVE

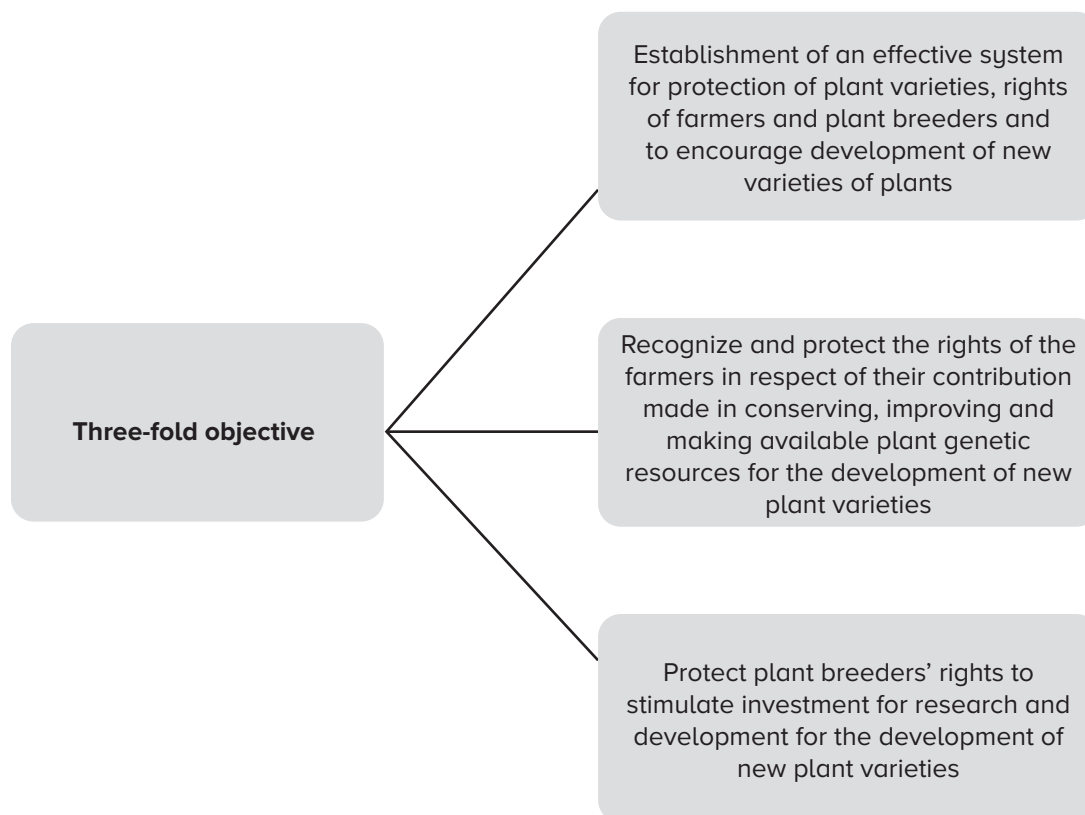
The objective of the Act is to establish a strong framework for the protection of plant varieties, of farmers' and plant breeders' rights, and to encourage the development of new plant varieties. To recognise and protect farmers' rights in relation to the commitments they made when preserving, enhancing, and making available plant genetic resources for the development of new plant varieties.

To hasten rural development across the country, protect the rights of plant breeders, and encourage investment in creative work both in the public and commercial sectors for the creation of new plant varieties. To promote the growth of the country's seed business, which will ensure that farmers have access to high-quality seeds and planting supplies.

In order 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 of new varieties of plants it has been considered necessary to recognize and protect the rights of the farmers in respect of their contribution made at any time in conserving, improving and making available plant genetic resources for the development of the new plant varieties. Moreover to accelerate agricultural development, it is necessary to protect plants breeders' rights to stimulate investment for research and development for the development of new plant varieties.

Such protection is likely to facilitate the growth of the seed industry which will ensure the availability of high quality seeds and planting material to the farmers. India having ratified the Agreement on Trade Related Aspects of the Intellectual Property Rights has to make provision for giving effect to Agreement. To give effect to the aforesaid objectives the Protection of Plant Varieties and Farmers' Rights Act, 2001 has been enacted in India.

Three fold objectives are-



PROTECTION OF PLANT VARIETIES AND FARMERS' RIGHTS AUTHORITY AND REGISTRY

Chapter II contains sections 3-13 and deals with both Protection of Plant Varieties and Farmers' Rights Authority and Registry

PROTECTION OF PLANT VARIETIES AND FARMERS' RIGHTS AUTHORITY

Establishment of Authority

Section 3 provides for Authority. It was established by the Department of Agriculture, Cooperation and Farmers Welfare, Ministry of Agriculture, and Farmers Welfare to carry out the provisions of the Act. The authority's main executive is the chairwoman. According to the Government of India, the authority consists of 15 people, including the chairwoman. (GOI). Eight of them serve as ex-officio representatives to various departments and ministries; three come from SAUs and state governments, and the central government designates one representative for each of the associations representing farmers, ancestors, the seed business, and women involved in horticultural activities. The authority's ex-officio member secretary is the Registrar General.

The Registrar-General shall be the ex officio member-secretary of the Authority. The Chairperson shall appoint a Standing Committee consisting of five members, one of whom shall be a member who is a representative from a farmers' organization, to advise the Authority on all issues including farmers' rights.

Meetings of Authority

Section 4 states that-

The Authority shall meet at such time and place and shall observe such rules of procedure in regard to the transaction of business at its meetings [including the quorum at its meetings and the transaction or business of its Standing Committee appointed under sub-section (7) of section 3 as may be prescribed.

The Chairperson of the Authority shall preside at the meetings of the Authority.

If, for any reason the Chairperson is unable to attend any meeting of the Authority, any member of the Authority chosen by the members present shall preside at the meeting.

All questions which come before any meeting of the Authority shall be decided by a majority of the votes of the members of the Authority present and voting and in the event of equality of votes, the Chairperson of the Authority or in his absence, the person presiding shall have and exercise a second or casting vote.

Every member who is in any way, whether directly, indirectly or personally, concerned or interested in a matter to be decided at the meeting shall disclose the nature of his concern of interest and after such disclosure, the member, concerned or interested, shall not attend that meeting.

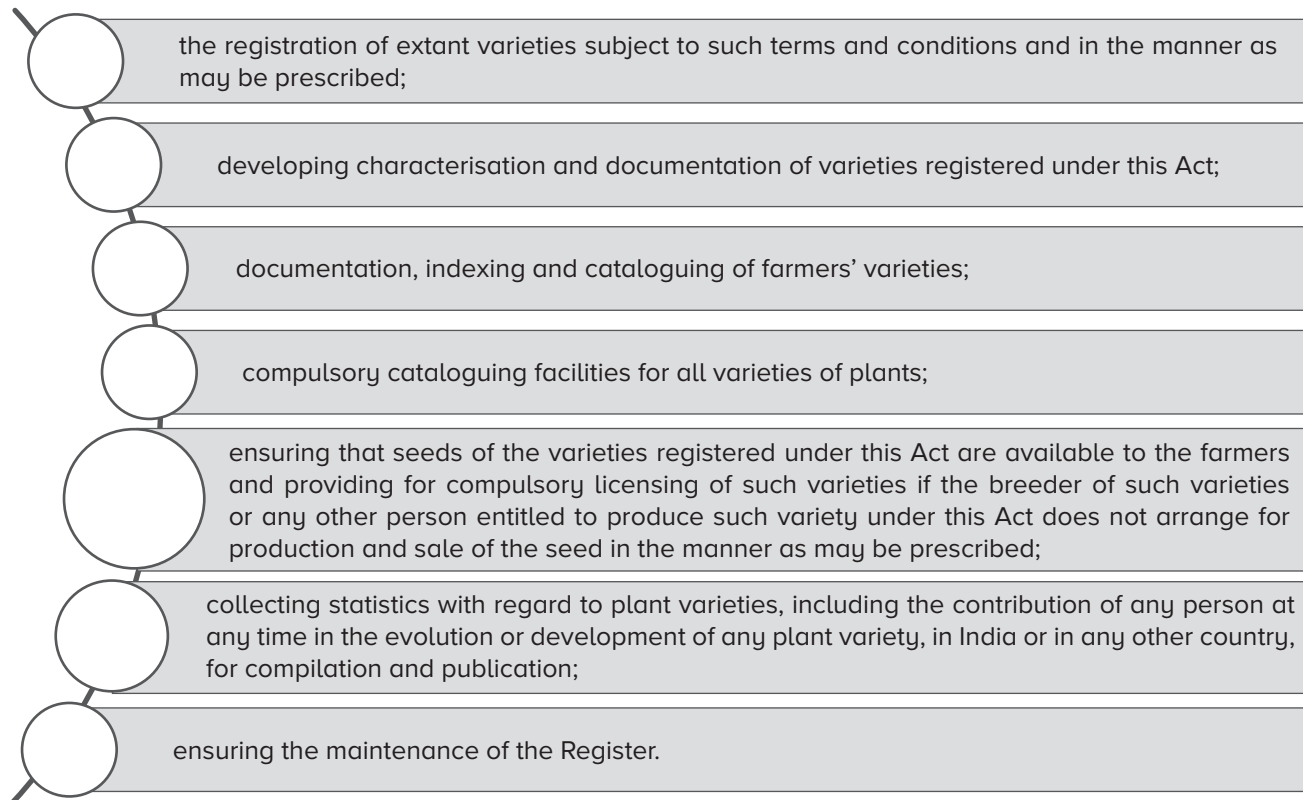
No act or proceeding of the Authority shall be invalid merely by reason of—

- (a) any vacancy in, or any defect in the constitution of, the Authority; or
- (b) any defect in the appointment of a person acting as the Chairperson or a member of the Authority; or
- (c) any irregularity in the procedure of the Authority not affecting the merits of the case.

General functions of Authority

It shall be the duty of the Authority 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.

In particular, and without prejudice to the generality of the foregoing provisions, the measures referred to in sub-section (1) may provide for—



Power of Authority

According to Section 11 in all proceedings under this Act before the Authority or the Registrar,-

- (a) The Authority or the Registrar, as the case may be, shall have all the powers of a civil court for the purposes of receiving evidence, administering oaths, enforcing the attendance of witnesses, compelling the discovery and production of documents and issuing commissions for the examination of witnesses;
- (b) The Authority or the Registrar may, subject to any rule made in this behalf under this Act, make such orders as to costs as it considers reasonable and any such order shall be executable as a decree of a civil court.

REGISTRY

Registry and offices thereof

As per section 12, the Central Government shall establish, for the purposes of this Act, a Registry which shall be known as the Plant Varieties Registry.

The Authority may appoint such number of Registrars as it thinks necessary for registration of plant varieties under the superintendence and direction of the Registrar-General under this Act and may make regulations with respect to their duties and jurisdiction. There shall be a seal of the Plant Varieties Registry.

National Register of Plant Varieties

Section 13 provides that for the purposes of this Act, a Register called the National Register of Plant Varieties shall be kept at the head office of the Registry, wherein shall be entered the names of all the registered plant varieties with the names and addresses of their respective breeders, the right of such breeders in respect of the registered varieties, the particulars of the denomination of each registered variety, its seed or other propagating material along with specification of salient features thereof and such other matters as may be prescribed.

It may be noted that-

“seed” means a type of living embryo or propagule capable of regeneration and giving rise to a plant which is true to such type.[Section 2(x)]

“variety”, means a plant grouping except micro-organism within a single botanical taxon of the lowest known rank, which can 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. [Section 2 (2a)].

Protection of Plant Varieties and Farmers’ Rights Authority, India

- In order 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 of new varieties of plants it has been considered necessary to recognize and protect the rights of the farmers in respect of their contribution made at any time in conserving, improving and making available plant genetic resources for the development of the new plant varieties. Moreover to accelerate agricultural development, it is necessary to protect plants breeders’ rights to stimulate investment for research and development for the development of new plant varieties.
- Such protection is likely to facilitate the growth of the seed industry which will ensure the availability of high quality seeds and planting material to the farmers. India having ratified the Agreement on Trade Related Aspects of the Intellectual Property Rights has to make provision for giving effect to Agreement. To give effect to the aforesaid objectives the Protection of Plant Varieties and Farmers’ Rights Act, 2001 has been enacted in India.
- For the purposes of this Act, Protection of Plant Varieties and Farmers’ Rights Authority has been established and is located at the address mentioned below:

“NASC Complex, DPS Marg,

Opp- Todapur, New Delhi-110 012.”

REGISTRATION OF PLANT VARIETIES AND ESSENTIALLY DERIVED VARIETY

The provisions regarding Registration of Plant varieties and essentially derived variety are contained in Chapter III ranging from Section 14 to Section 23 of the Protection of Plant Varieties and Farmers-Rights Act, 2001.

It may be noted that-

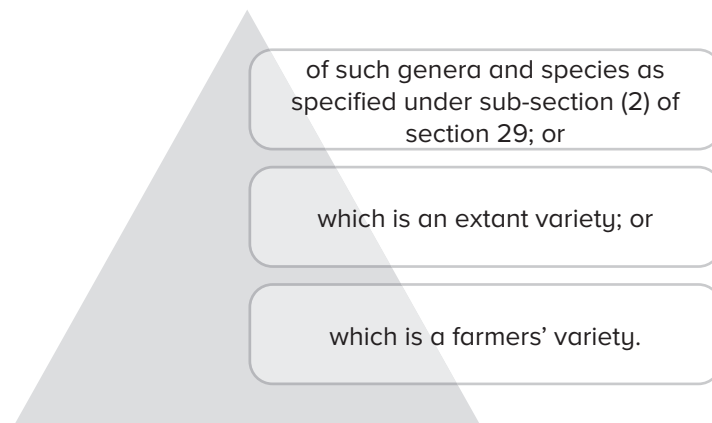
“essentially derived variety” as, “essentially derived variety”, in respect of a variety (the initial variety), shall be said to be essentially derived from such initial variety when it-

- (i) is 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 (except for the differences which result from the act of derivation) to such initial variety in the expression of the essential characteristics that result from the genotype or combination of genotype of such initial variety. [Section 2(i)]

APPLICATION FOR REGISTRATION

Application for registration

Section 14 states that any person specified in section 16 may make an application to the Registrar for registration of any variety-



Registrable varieties

Section 15 states that, a new variety shall be registered under this Act if it conforms to the criteria of novelty, distinctiveness, uniformity and stability.

Notwithstanding anything contained in sub-section (1), an extant variety shall be registered under this Act within a specified period if it conforms to such criteria of distinctiveness, uniformity and stability as shall be specified under the regulations.

For the purposes of sub-sections (1) and (2), as the case may be, a new variety shall be deemed to be—

- a) novel, if, at the date of filing of the application for registration for protection, the propagating or harvested material of such variety has not been sold or otherwise disposed of by or with the consent of its breeder or his successor for the purposes of exploitation of such variety—
 - i) in India, earlier than one year; or
 - ii) outside India, in the case of trees or vines earlier than six years, or in any other case, earlier than four years, before the date of filing such application:

Provided that a trial of a new variety which has not been sold or otherwise disposed of shall not affect the right to protection:

Provided further that the fact that on the date of filing the application for registration, the propagating or harvested material of such variety has become a matter of common knowledge other than through the aforesaid manner shall not affect the criteria of novelty for such variety;

- b) distinct, if it is clearly distinguishable by at least one essential characteristic from any another variety whose existence is a matter of common knowledge in any country at the time of filing of the application.

Explanation.—For the removal of doubts, it is hereby declared that the filing of an application for the granting of a breeder's right to a new variety or for entering such variety in the official register of varieties in any convention country shall be deemed to render that variety a matter of common knowledge from the date of the application in case the application leads to the granting of the breeder's right or to the entry of such variety in such official register, as the case may be;

- c) 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;
- d) stable, if its essential characteristics remain unchanged after repeated propagation or, in the case a particular cycle of propagation, at the end of each such cycle.

In which category is a new variety bred by a farmer is registered?

A variety developed or bred as a new variety by following breeding procedures by creating variability using other varieties or genetic stocks to be disclosed as being utilized as parents of the breeding material or for variability through other means for selection, shall be categorised as any other new variety bred by a breeder, under this Act. That means for all purposes and processes, such a variety will be treated in the same manner as any other breeder's variety and will also be registered eventually as a new variety or extant variety, as the case may be following DUS testing procedures and formalities as required. Here, the farmer will be considered as a breeder without separating him from other breeders.

A new variety shall not be registered under this Act if the denomination given to such variety—

- i) is not capable of identifying such variety; or
- ii) consists solely of figures; or
- iii) is liable to mislead or to cause confusion concerning the characteristics, value identity of such variety or the identity of breeder of such variety; or
- iv) is not different from every denomination which designates a variety of the same botanical species or of a closely related species registered under this Act; or
- v) is likely to deceive the public or cause confusion in the public regarding the identity of such variety; or
- vi) is likely to hurt the religious sentiments respectively of any class or section of the citizens of India; or
- vii) is prohibited for use as a name or emblem for any of the purposes mentioned in section 3 of the Emblems and Names (Prevention of Improper Use) Act, 1950 (12 of 1950); or
- viii) is comprised of solely or partly of geographical name:

Provided that the registrar may register a variety, the denomination of which comprises solely or partly of a geographical name, if he considers that the use of such denomination in respect of such variety is an honest use under the circumstances of the case.

It may be noted that –

“essential characteristics” means such heritable traits of a plant variety which are determined by the expression of one or more genes of other heritable determinants that contribute to the principle features, performance or value of the plant variety; [Section 2(h)]

“extant variety” means a variety available in India which is—

- (i) notified under section 5 of the Seeds Act, 1966 (54 of 1966); or
- (ii) farmers’ variety; or
- (iii) a variety about which there is common knowledge; or
- (iv) any other variety which is in public domain; [Section 2(j)]

“farmer” means any person who—

- (i) cultivates crops by cultivating the land himself; or
- (ii) cultivates crops by directly supervising the cultivation of land through any other person; or
- (iii) conserves and preserves, severally or jointly, with any person any wild species or traditional varieties or adds value to such wild species or traditional varieties through selection and identification of their useful properties; [Section 2(k)]

Does that mean a claim for a new variety by a plant breeder (not farmer) made as a selection in the traditional variety or landrace cannot be registered as a new variety?

Yes. Unless the breeder names the farmer or community as a co-developer or beneficiary with consent or there is evidence for having artificially created variability in a population derived from a traditional variety by any tools of plant breeding other than simple selection in a naturally cultivated traditional variety, such as hybridization, mutation breeding, backcross breeding, introgression, population improvement, hybrid, etc., followed by repeated progeny screening with selection, etc., in the subsequent generations, there is no possibility of registration of such a variety as new variety bred by a breeder, ignoring the role of the farmers’ in having traditionally conserved the variety.

Farmers’ interest will always be protected and in such case, with the help of the local Panchayat and State Agricultural University officials, such varieties can be protected in the name of the community of farmers’ group by evidence of heritage.

Persons who may make application

Section 16 states that, an application for registration under section 14 shall be made by-

- (a) any person claiming to be the breeder of the variety; or
- (b) any successor of the breeder of the variety; or
- (c) any person being the assignee of the breeder of the variety in respect of the right to make such application; or
- (d) any farmer or group of farmers or community of farmers claiming to be the breeder of the variety; or
- (e) any person authorized in the prescribed manner by a person specified under clauses (a) to (d) to make application on his behalf; or

- (f) any university or publicly funded agricultural institution claiming to be the breeder of the variety.

An application under sub-section (1) may be made by any of the persons referred to therein individually or jointly with any other person.

Compulsory variety denomination

Section 17 states that every applicant shall assign a single and distinct denomination to a variety with respect to which he is seeking registration under this Act in accordance with the regulations.

It may be noted that-

“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 combination of letters and figures written in any language. [Section 2(g)]

Form of application

Section 18- *Provides that* every application for registration under section 14 shall-

- (a) be with respect to a variety;
- (b) state the denomination assigned to such variety by the applicant;
- (c) be accompanied by an affidavit sworn by the applicant that such variety does not contain any gene or gene sequence involving terminator technology;
- (d) be in such form as may be specified by regulations;
- (e) contain a complete passport data of the parental lines from which the variety has been derived along with the geographical location in India from where the genetic material has been taken and all such information relating to the contribution, if any, of any farmer, village community, institution or organization in breeding, evolving or developing the variety;
- (f) be accompanied by a statement containing a brief description of the variety bringing out its characteristics of novelty, distinctiveness, uniformity and stability as required for registration;
- (g) be accompanied by such fees as may be prescribed;
- (h) contain a declaration that the genetic material or parental material acquired for breeding, evolving or developing the variety has been lawfully acquired; and
- (i) be accompanied by such other particulars as may be prescribed:

Provided that in case where the application is for the registration of farmers' variety, nothing contained in clauses (b) to (i) shall apply in respect of the application and the application shall be in such form as may be prescribed.

Acceptance of application or amendment thereof

Section 20 states on receipt of an application under section 14, the Registrar may, after making such inquiry as he thinks fit with respect to the particulars contained in such application, accept the application absolutely or subject to such conditions or limitations as he deems fit.

Where the Registrar is satisfied that the application does not comply with the requirements of this Act or any rules or regulations made thereunder, he may, either-

- (a) require the applicant to amend the application to his satisfaction; or
- (b) reject the application:

Provided that no application shall be rejected unless the applicant has been given a reasonable opportunity of presenting his case.

Advertisement of application

According to Section 21, where an application for registration of a variety has been accepted absolutely or subject to conditions or limitations under sub-section (1) of section 20, the Registrar shall, as soon as after its acceptance, cause such application together with the conditions or limitations, if any, subject to which it has been accepted and the specifications of the variety for registration of which such application is made including its photographs or drawings, to be advertised in the prescribed manner calling objections from the persons interested in the matter.

Any person may, within three months from the date of the advertisement of an application for registration on payment of the prescribed fees, give notice in writing in the prescribed manner, to the Registrar of his opposition to the registration.

Opposition to the registration under sub-section (2) may be made on any of the following grounds, namely:-

- (a) that the person opposing the application is entitled to the breeder's right as against the applicant; or
- (b) that the variety is not registrable under this Act; or
- (c) that the grant of certificate of registration may not be in public interest; or
- (d) that the variety may have adverse effect on the environment.

The Registrar shall serve a copy of the notice of opposition on the applicant for registration and, within two months from the receipt by the applicant of such copy of the notice of opposition, the applicant shall send to the Registrar in the prescribed manner a counter-statement of the grounds on which he relies for his application, and if he does not do so, he shall be deemed to have abandoned his application.

If the applicant sends such counter-statement, the Registrar shall serve a copy thereof on the person giving notice of opposition.

Any evidence upon which the opponent and the applicant may rely shall be submitted, in the manner prescribed and within the time prescribed, to the Registrar and the Registrar shall give an opportunity to them to be heard, if so desired.

The Registrar shall, after hearing the parties, if so required, and considering the evidence, decide whether and subject to what conditions or limitations, if any, the registration is to be permitted and may take into account a ground of objection whether relied upon by the opponent or not.

Where a person giving notice of opposition or an applicant sending a counter-statement after receipt of a copy of such notice neither resides nor carries on business in India, the Registrar may require him to give security for the cost of proceedings before him and in default of such security being duly given may treat the opposition or application, as the case may be, as abandoned.

The Registrar may, on request, permit correction of any error in, or any amendment of, a notice of opposition or a counter-statement on such terms as he may think fit.

Registrar to consider grounds of opposition

Section 22 provides that the Registrar shall consider all the grounds on which the application has been opposed and after giving reasons for his decision, by order, uphold or reject the opposition.

REGISTRATION OF ESSENTIALLY DERIVED VARIETY

Registration of essentially derived variety

As per Section 23, an application for the registration of an essentially derived variety of the genera or species specified under sub-section (2) of section 29 by the Central Government shall be made to the Registrar by or on behalf of any person referred to in section 14 and in the manner specified in section 18 as if for the word “variety”, the words “essentially derived variety” have been substituted there in and shall be accompanied by such documents and fees as may be prescribed.

When the Registrar is satisfied that the requirements of sub-section (1) have been complied with to his satisfaction, he shall forward the application with his report and all the relevant documents to the Authority.

On receipt of an application under sub-section (2), the Authority shall get examined such essentially derived variety to determine as to whether the essentially derived variety is a variety derived from the initial variety by conducting such tests and following such procedure as may be prescribed.

When the Authority is satisfied on the report of the test referred to in sub-section (3) that the essentially derived variety has been derived from the initial variety, it may direct the Registrar to register such essentially derived variety and the Registrar shall comply with the direction of the Authority.

Where the Authority is not satisfied on the report of the test referred to in sub-section (3) that the essentially derived variety has been derived from the initial variety it shall refuse the application.

The rights of the breeder of a variety contained in section 28 shall apply to the breeder of essentially derived variety:

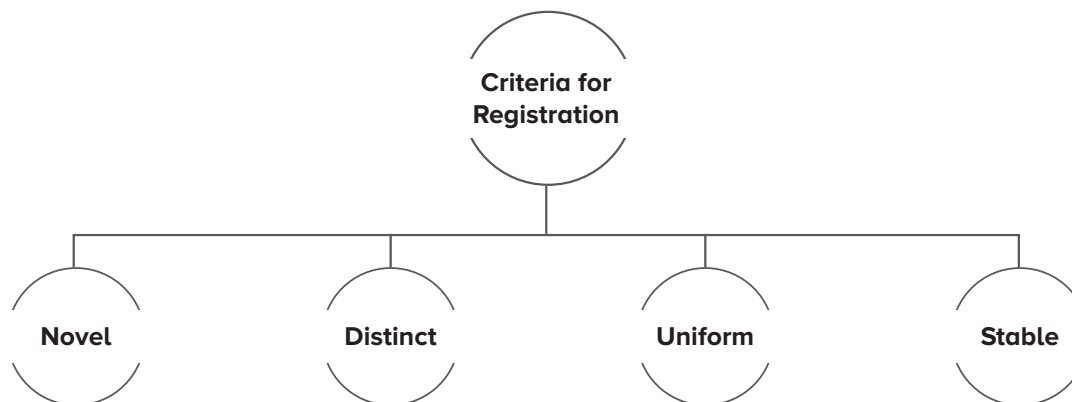
Provided that the authorization by the breeder of the initial variety to the breeder of essentially derived variety under sub-section (2) of section 28 may be subject to such terms and conditions as both the parties may mutually agree upon.

An essentially derived variety shall not be registered under this section unless it satisfies the requirements of section 15 as if for the word “variety”, the words “essentially derived variety” have been substituted therein.

When an essentially derived variety has been registered by the Registrar in compliance with the direction of the Authority under sub-section (4) the Registrar shall issue to the applicant a certificate of registration in the prescribed form and sealed with the seal of the Registry and send a copy thereof to the Authority and to such other authority, as may be prescribed, for information.

Criteria for Registration of a Variety

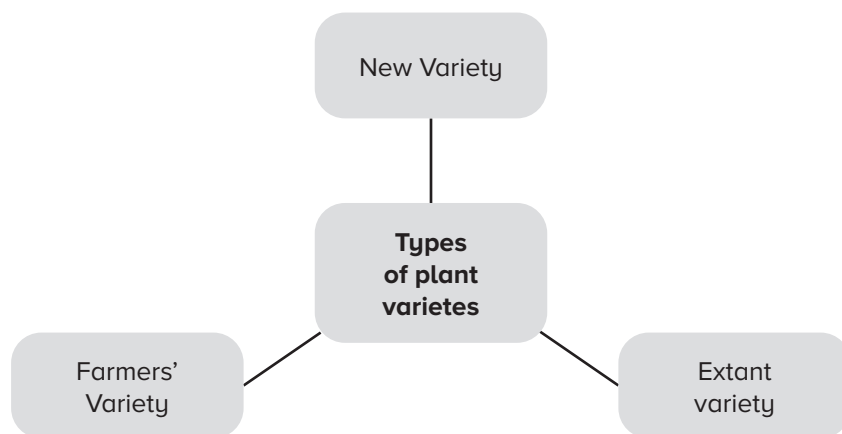
Below given are the requirements for registration of a plant variety. They are-



1. **Novel:** If at the date of filing an application for registration for protection, the propagating or harvested material of such variety has not been sold or otherwise disposed of in India earlier than one year or outside India, in the case of trees or vines earlier than six years, or in any other case earlier than four years, before the date of filing such application.
2. **Distinct:** A variety is said to be distinct if it is clearly distinguishable by at least one essential characteristic from any other variety whose existence is a matter of common knowledge in any country at the time of filing an application.
3. **Uniform:** A variety is said to be 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.
4. **Stable:** A variety is said to be stable if its essential characteristics remain unchanged after repeated propagation or, in the case of a particular cycle of propagation, at the end of each such cycle.

Types of Varieties

Below given are the classification of the varieties available. They are-



1. **New Variety:** A new variety can be registered under the Act if it conforms to the criteria for novelty, distinctiveness, uniformity and stability.
2. **Extant variety:** An extant variety can be registered under the Act if it conforms to the criteria for distinctiveness, uniformity and stability. Thus novelty is not considered while going for the protection of plant varieties.

The PPV&FRA under section 2(j)(iii) and (iv) defines “extant variety” as any variety “which is in public domain or about which there is a common knowledge.”

3. **Farmers' Variety:** Under section 2 (l) farmers variety means a variety “which has been traditionally cultivated and evolved by the farmers in their fields”.

It may be noted that-

“Farmers Variety” means a variety which-

- (i) has been traditionally cultivated and evolved by the farmers in their fields, or
- (ii) is a wild relative or land race of a variety about which the farmers possess the common knowledge.
[Section 2(l)]

Persons Who Can Apply For the Registration of Plant Variety

Application for registration of a variety can be made by:

1. any person claiming to be the breeder of the variety;
2. any successor of the breeder of the variety;
3. any person being the assignee or the breeder of the variety in respect of the right to make such application;
4. any farmer or group of farmers or community of farmers claiming to be breeder of the variety;
5. any person authorized to make application on behalf of farmers; and
6. any University or publicly funded agricultural institution claiming to be breeder of the variety.

Filing Requirements for Registration of a Plant Variety

- Name, address and Nationality of Applicants as well as the address of service of their agent.
- Denomination assigned to such variety.
- Accompanied by an affidavit that variety does not contain any gene or gene sequences 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 or organization etc in breeding, evolving or developing the variety.
- Characteristics of variety with description for Novelty, Distinctiveness, Uniformity and Stability.
- A declaration that the genetic material used for breeding of such variety has been lawfully acquired.

Is a variety registered or proposed for registration as a farmer's variety distinguishable from a modern variety bred by plant breeders including farmer as a plant breeder?

Yes.

- (i) ***A farmer's variety is clearly distinguishable from a plant breeder's variety by being more productive with advanced agronomic features such as dwarf, early maturity, adaptive physiological traits, resistant traits to diseases and pests, responsive to fertigation and irrigation, etc., whereas the typical farmer's variety is either a landrace itself (claimed as community variety by the community) or a natural mutant identified in the landrace or traditional variety cultivated for a long period by farmers in the region, but with a difference in one or two traits from the known traits of the land race or traditional variety.***
- (ii) ***Historically, a farmer's variety or landrace can never match the productivity performance as well as trait expression variation of an advanced variety bred through plant breeding processes by a breeder (including farmer as plant breeder). But it will retain the traditional value present in the variety for which it is a local niche or is being cultivated for long periods as a tradition by the farmers in the region even though it is lower in productivity than the modern high yielding varieties bred by plant breeders.***
- (iii) ***The above (ii) is the reason why in the case of typical farmer's variety, DUS testing is not done nor testing is done for two years, but a single year testing is done as Grow Out Test for uniformity and purity of the population, after the same is assured by the technical inputs from the ICAR crop mandate institution in the region or State Agricultural University or other relevant public sector institutions where crop improvement/plant breeding activities are taken up.***

DURATION AND EFFECT OF REGISTRATION AND BENEFIT SHARING

The provisions regarding duration and effect of registration and benefit sharing are contained in Chapter IV ranging from Section 24 to Section 32 of the Protection of Plant Varieties and Farmers-Rights Act, 2001.

It may be noted that-

“benefit sharing”, in relation to a variety, means such proportion of the benefit accruing to a breeder of such variety or such proportion of the benefit accruing to the breeder from an agent or a licensee of such variety, as the case may be, for which a claimant shall be entitled as determined by the Authority under section 26. [Section 2(b)]

Certificate of Registration

The maximum time taken for issuing certificate of registration is three years from the date of filing of the application for registration of a plant variety.

Issue of certificate of registration

Section 24 states that, when an application for registration of a variety (other than an essentially derived variety) has been accepted and either –

- (a) the application has not been opposed and the time of notice of opposition has expired; or
- (b) the application has been opposed and the opposition has been rejected, the Registrar shall register the variety.

On the registration of the variety (other than an essentially derived variety), the Registrar shall issue to the applicant a certificate of registration in the prescribed form and sealed with the seal of the Registry and send a copy thereof to the Authority for determination of benefit sharing and to such other authority, as may be prescribed, for information. The maximum time required by the Registrar for issuing the certificate of registration from the date of filing of the application for registration of a variety shall be such as may be prescribed.

Where registration of a variety (other than an essentially derived variety), is not completed within twelve months from the date of the application by reason of default on the part of the applicant, the Registrar may, after giving notice to the applicant in the prescribed manner, treat the application as abandoned unless it is completed within the time specified in that behalf in the notice.

The Registrar may amend the Register or a certificate of registration for the purpose of correcting a clerical error or an obvious mistake.

The Registrar shall have power to issue such directions to protect the interests of a breeder against any abusive act committed by any third party during the period between filing of application for registration and decision taken by the Authority on such application.

The certificate of registration issued under this section or sub-section (8) of section 23 shall be valid for nine years in the case of trees and vines and six years in the case of other crops and may be reviewed and renewed for the remaining period on payment of such fees as may be fixed by the rules made in this behalf subject to the condition that the total period of validity shall not exceed, –

- (i) in the case of trees and vines, eighteen years from the date of registration of the variety;
- (ii) in the case of extant variety, fifteen years from the date of the notification of that variety by the Central Government under section 5 of the Seeds Act, 1966; and
- (iii) in other cases, fifteen years from the date of registration of the variety.

Publication of list of varieties

Section 25 states that, the Authority shall, within such intervals as it thinks appropriate, publish the list of varieties which have been registered during that interval.

Determination of benefit sharing by Authority

Section 26- On receipt of copy of the certificate of registration under sub-section (8) of section 23 or sub-section (2) of section 24, the Authority shall publish such contents of the certificate and invite claims of benefit sharing to the variety registered under such certificate in the manner as may be prescribed.

On invitation of the claims under sub-section (1), any person or group of persons or firm or governmental or non-governmental organisation shall submit its claim of benefit sharing to such variety in the prescribed form within such period, and accompanied with such fees, as may be prescribed:

Provided that such claim shall only be submitted by any –

- (i) person or group of persons, if such person or every person constituting such group is a citizen of India; or
- (ii) firm or governmental or non-governmental organisation, if such firm or organisation is formed or established in India.

On receiving a claim under sub-section (2), the Authority shall send a copy of such claim to the breeder of the variety registered under such certificate and the breeder may, on receipt of such copy, submit his opposition to such claim within such period and in such manner as may be prescribed.

The Authority shall, after giving an opportunity of being heard to the parties, dispose of the claim received under sub-section (2).

While disposing of the claim under sub-section (4), the Authority shall explicitly indicate in its order the amount of the benefit sharing, if any, for which the claimant shall be entitled and shall take into consideration the following matters, namely:-

- (a) the extent and nature of the use of genetic material of the claimant in the development of the variety relating to which the benefit sharing has been claimed;
- (b) the commercial utility and demand in the market of the variety relating to which the benefit sharing has been claimed.

The amount of benefit sharing to a variety determined under this section shall be deposited by the breeder of such variety in the manner referred to in clause (a) of sub-section (1) of section 45 in the National Gene Fund.

The amount of benefit sharing determined under this section shall, on a reference made by the Authority in the prescribed manner, be recoverable as an arrear of land revenue by the District Magistrate within whose local limits of jurisdiction the breeder liable for such benefit sharing resides.

Breeder to deposit seeds or propagating material

Section 27 provides that the breeder shall be required to deposit such quantity of seeds or propagating material including parental line seeds of registered variety in the National Gene Bank as may be specified in the regulations for reproduction purpose at the breeder's expense within such time as may be specified in that regulation.

The seeds or propagating material parental line seeds to be deposited under sub-section (1) shall be deposited to the National Gene Bank specified by the Authority.

Registration to confer right

Subject to the other provisions of this Act, a certificate of registration for a variety issued under this Act shall confer an exclusive right on the breeder or his successor, his agent or licensee, to produce, sell, market, distribute, import or export the variety:

Provided that in the case of an extant variety, unless a breeder or his successor establishes his right, the Central Government, and in cases where such extant variety is notified for a State or for any area thereof under section 5 of the Seeds Act, 1966 (54 of 1966), the State Government, shall be deemed to be the owner of such right.

A breeder may authorize any person to produce, sell, market or otherwise deal with the variety registered under this Act subject to such limitations and conditions as may be specified by regulations.

Every authorization under this section shall be in such form as may be specified by regulations.

Where an agent or a licensee referred to in sub-section (1) becomes entitled to produce, sell, market, distribute, import or export a variety, he shall apply in the prescribed manner and with the prescribed fees to the Registrar to register his title and the Registrar shall, on receipt of application and on proof of title to his satisfaction, register him as an agent or a licensee, as the case may be, in respect of the variety for which he is entitled for such right, and shall cause particulars of such entitlement and conditions or restrictions, if any, subject to which such entitlement is made, to be entered in the Register:

Provided that when the validity of such entitlement is in dispute between the parties, the Registrar may refuse to register the entitlement and refer the matter in the prescribed manner to the Authority and withhold the registration of such entitlement until the right of the parties in dispute so referred to have been determined by the Authority.

The Registrar shall issue a certificate of registration under sub-section (4) to the applicant after such registration and shall enter in the certificate the brief conditions of entitlement, if any, in the prescribed manner, and such certificate shall be the conclusive proof of such entitlement and the conditions or restrictions thereof, if any.

Subject to any agreement subsisting between the parties, an agent or licensee of a right to a variety registered under sub-section (4) shall be entitled to call upon the breeder or his successor thereof to take proceedings to prevent infringement thereof, and if the breeder or his successor refuses or neglects to do so within three months after being so called upon, such registered agent or licensee may institute proceedings for infringement in his own name as if he were the breeder, making the breeder or his successor a defendant.

Notwithstanding anything contained in any other law, a breeder or his successor so added as defendant shall not be liable for any costs unless he enters an appearance and takes part in the proceedings.

Nothing in this section shall confer on a registered agent or registered licensee of a variety any right to transfer such right further thereof.

Without prejudice to the registration under sub-section (4), the terms of registration--

- (a) may be varied by the Registrar as regards the variety in respect of which, or any condition or restriction subject to which, it has effect on receipt of an application in the prescribed manner of the registered breeder of such variety or his successor;
- (b) may be cancelled by the Registrar on the application in the prescribed manner of the registered breeder of such variety or his successor or of the registered agent or registered licensee of such variety;
- (c) may be cancelled by the Registrar on the application in the prescribed manner of any person other than the breeder, his successor, the registered agent or the registered licensee on any of the following grounds, namely:-
 - (i) that the breeder of a variety or his successor or the registered agent or registered licensee of such variety, misrepresented, or failed to disclose, some fact material to the application for registration under sub-section (4) which if accurately represented or disclosed would have justified the refusal of the application for registration of the registered agent or registered licensee;
 - (ii) that the registration ought not to have been effected having regard to the right vested in the applicant by virtue of a contract in the performance of which he is interested;

- (d) may be cancelled by the Registrar on the application in the prescribed manner of the breeder of a registered variety or his successor on the ground that any stipulation in the agreement between the registered agent or the registered licensee, as the case may be and such breeder or his successor regarding the variety for which such agent or licensee is registered is not being enforced or is not being complied with;
- (e) may be cancelled by the Registrar on the application of any person in the prescribed manner on the ground that the variety relating to the registration is no longer existing.

The Registrar shall issue notice in the prescribed manner of every application under this section to the registered breeder of a variety or his successor and to each registered agent or registered licensee (not being the applicant) of such variety.

The Registrar shall, before making any order under sub-section (9), forward the application made in that behalf along with any objection received by any party after notice under sub-section (10) for the consideration of the Authority, and the Authority may, after making such inquiry as it thinks fit, issue such directions to the Registrar as it thinks fit and the Registrar shall dispose of the application in accordance with such directions. (Section 28)

Exclusion of certain varieties

Section 29 provides that notwithstanding anything contained in this Act, no registration of a variety shall be made under this Act in cases 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.

The Central Government shall, by notification in the Official Gazette, specify the genera or species for the purposes of registration of varieties other than extant varieties and farmers' varieties under this Act.

Notwithstanding anything contained in sub-section (2) and sub-sections (1) and (2) of section 15, no variety of any genera or species which involves any technology which is injurious to the life or health of human beings, animals or plants shall be registered under this Act.

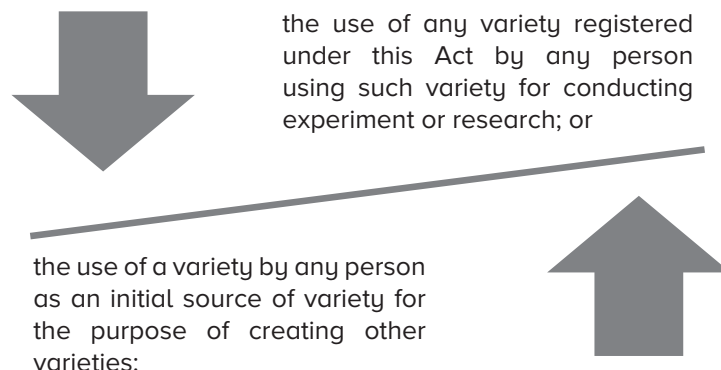
Explanation.--For the purposes of this sub-section, the expression "any technology" includes genetic use restriction technology and terminator technology.

The Central Government shall not delete any genera or species from the list of genera or species specified in a notification issued under sub-section (2) except in the public interest.

Any variety belonging to the genera or species excluded under sub-section (4) shall not be eligible for any protection under this Act.

Researcher's Right

Section 30 states that nothing contained in this Act shall prevent-



Provided that the authorization of the breeder of a registered variety is required where the repeated use of such variety as a parental line is necessary for commercial production of such other newly developed variety.

Special provision relating to application for registration from citizens of convention countries

According to Section 31, with a view to the fulfillment of a treaty, convention or arrangement with any country outside India which affords to citizens of India similar privileges as granted to its own citizens, the Central Government may, by notification in the Official Gazette, declare such country to be a convention country for the purposes of this Act.

Where a person has made an application for the granting of a breeder's right to a variety or for entering such variety in the official register of varieties in a convention country and that person, or any person entitled to make application on his behalf under section 14 or section 23, makes an application for the registration of such variety in India within twelve months after the date on which the application was made in the convention country, such variety shall, if registered under this Act, be registered as of the date on which the application was made in the convention country and that date shall be deemed for the purposes of this Act to be the date of registration.

Where applications have been made for granting of a breeder's right to a variety, or for entering such variety in the official register of varieties in two or more convention countries, the period of twelve months referred to in sub-section (2) shall be reckoned from the date on which the earlier or earliest of those applications were made.

Nothing in this Act shall entitle the breeder of a registered variety for infringement of rights other than protected under this Act which took place prior to the date of application of registration under this Act.

Provisions as to reciprocity

As per section 32, where any country declared by the Central Government in this behalf by notification in the Official Gazette under sub-section (1) of section 31 does not accord to citizens of India the same rights in respect of the registration and protection of a variety, as it accords to its own nationals, no national of such country shall be entitled, either solely or jointly with any other person, to apply for the registration of a variety or be entitled to get a variety registered under this Act.

Duration of Registration

For trees and vines (Perennials)	18 years from the date of registration of the variety.
For other crops (Annuals)	15 years from the date of registration of the variety.
For extant varieties	15 years from the date of notification of that variety by the Central Government under section 5 of the Seeds Act, 1966.

Exemptions Provided By 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.
- *Researcher's Exemption:* (i) the use of registered variety for conducting experiment. (ii) the use of variety as an initial source of variety for the purpose of creating other varieties.

SURRENDER AND REVOCATION OF CERTIFICATE AND RECTIFICATION AND CORRECTION OF REGISTER

The provisions regarding surrender and revocation of certificate and rectification and correction of register are contained in Chapter V ranging from Section 33 to Section 38 of the Protection of Plant Varieties and Farmers-Rights Act, 2001.

Surrender and Revocation of Certificate

According to Section 33, a breeder of a variety registered under this Act may, at any time by giving notice in the prescribed manner to the Registrar, offer to surrender his certificate of registration.

Where such an offer is made, the Registrar shall notify in the prescribed manner every registered agent or registered licensee relating to such certificate.

Any of such agent or licensee may, within the prescribed period after such notification, give notice to the Registrar of his opposition to the surrender and where any such notice is given, the Registrar shall intimate the contents of such notice to the breeder of such variety.

If the Registrar is satisfied after hearing the applicant and all the opponents, if desirous of being heard, that the certificate of registration may properly be surrendered, he may accept the offer and by order revoke the certificate of registration.

Revocation of protection on certain grounds

Section 34 provides that subject to the provisions contained in this Act, the protection granted to a breeder in respect of a variety may, on the application in the prescribed manner of any person interested, be revoked by the Authority on any of the following grounds, namely:-

that the grant of the certificate of registration has been based on incorrect information furnished by the applicant;



that the certificate of registration has been granted to a person who is not eligible for protection under this Act;



that the breeder did not provide the Registrar with such information, documents or material as required for registration under this Act;



that the breeder has failed to provide an alternative denomination of the variety which is the subject matter of the registration to the Registrar in case where the earlier denomination of such variety provided to the Registrar is not permissible for registration under this Act;



that the breeder did not provide the necessary seeds or propagating material to the person to whom compulsory licence has been issued under section 47 regarding the variety in respect of which registration certificate has been issued to such breeder;



that the breeder has not complied with the provisions of this Act or rules or regulations made thereunder;



that the breeder has failed to comply with the directions of the Authority issued under this Act;



that the grant of the certificate of registration is not in the public interest:

Provided that no such protection shall be revoked unless the breeder is given a reasonable opportunity to file objection and of being heard in the matter.

Payment of annual fees and forfeiture of registration in default thereof

Section 35 states that the Authority may, with the prior approval of the Central Government, by notification in the Official Gazette, impose a fee to be paid annually, by every breeder of a variety, agent and licensee thereof registered under this Act determined on the basis of benefit or royalty gained by such breeder, agent or licensee, as the case may be, in respect of the variety, for the retention of their registration under this Act.

If any breeder, agent or licensee fails to deposit the fee referred to in sub-section (7) imposed upon him under that sub-section in the prescribed manner up to two consecutive years, the Authority shall issue notice to such breeder, agent or licensee and on service of such notice if he fails to comply with the direction in the notice, the Authority shall declare all the protection admissible under the registration certificate issued to such breeder or agent or licensee forfeited.

The arrears of fee imposed under sub-section (1) shall be deemed to be the arrears of land revenue and shall be recoverable accordingly.

Power to cancel or change registration and to rectify the Register

On an application made in the prescribed manner to the Registrar by any person aggrieved, the Registrar may make such order as he may think fit for canceling or changing any certificate of registration issued under this Act on the ground of any contravention of the provisions of this Act or failure to observe a condition subject to which such registration certificate is issued.

Any person aggrieved by the absence or omission from the Register of any entry, or by any entry made in the Register without sufficient cause, or by any entry wrongly remaining on the Register, may apply in the prescribed manner to the Registrar and the Registrar may make such order for making, expunging or varying the entry as he may think fit.

The Registrar may, in any proceeding under this section, decide any question that may be necessary or expedient to decide in connection with the rectification of the Register.

The Registrar on his own motion may, after giving notice in the prescribed manner to the parties concerned and after giving them an opportunity of being heard, make any order referred to in sub-section (1) or sub-section (2). (Section 36)

FARMERS' RIGHTS

The provisions regarding Farmers' Rights are contained in Chapter VI ranging from Section 39 to Section 46 of the Protection of Plant Varieties and Farmers-Rights Act, 2001.

Farmers' Rights

Section 39 talks about farmer's rights. It states that notwithstanding anything contained in this Act-

- (i) A farmer who has bred or developed a new variety shall be entitled for registration and other protection in like manner as a breeder of a variety under this Act;
- (ii) The farmers' variety shall be entitled for registration if the application contains declaration as specified in clause (A) of sub-section (1) of section 18;
- (iii) A farmer who is engaged in the conservation of genetic resources of land races and wild relatives of economic plants and their improvement through selection and preservation shall be entitled in the prescribed manner for recognition and reward from the Gene Fund:

Provided that material so selected and preserved has been used as donors of genes in varieties registrable under this Act;

- (iv) A farmer shall be deemed to be entitled to save, use, sow, re-sow, exchange, share or sell his farm produce including seed of a variety protected under this Act in the same manner as he was entitled before the coming into force of this Act:

Provided that the farmer shall not be entitled to sell branded seed of a variety protected under this Act.

Explanation.--For the purposes of clause (iv), "branded seed" means any seed put in a package or any other container and labelled in a manner indicating that such seed is of a variety protected under this Act.

Where any propagating material of a variety registered under this Act has been sold to a farmer or a group of farmers or any organisation of farmers, the breeder of such variety shall disclose to the farmer or the group of farmers or the organisation of farmers, as the case may be, the expected performance under given conditions, and if such propagating material fails to provide such performance under such given conditions, the farmer or the group of farmers or the organisation of farmers, as the case may be, may claim compensation in the prescribed manner before the Authority and the Authority, after giving notice to the breeder of the variety and after providing him an opportunity to file opposition in the prescribed manner and after hearing the parties, may direct the breeder of the variety to pay such compensation as it deems fit, to the farmer or the group of farmers or the organisation of farmers, as the case may be.

Certain information to be given in application for registration

Section 40 states that, a breeder or other person making application for registration of any variety under Chapter III shall disclose in the application the information regarding the use of genetic material conserved by any tribal or rural families in the breeding or development of such variety,

If the breeder or such other person fails to disclose any information under sub-section (1), the Registrar may, after being satisfied that the breeder or such person has willfully and knowingly concealed such information, reject the application for registration.

Rights of communities

Section 41 provides for Right of communities. Any person or group of persons (whether actively engaged in farming or not) or any governmental or non-governmental organisation may, on behalf of any village or local community in India, file in any center notified, with the previous approval of the Central Government, by the Authority, in the Official Gazette, any claim attributable to the contribution of the people of that village or local community, as the case may be, in the evolution of any variety for the purpose of staking a claim on behalf of such village or local community.

Where any claim is made under sub-section (1), the center notified under that sub-section may verify the claim made by such person or group of persons or such governmental or non-governmental organisation in such manner as it deems fit, and if it is satisfied that such village or local community has contributed significantly to the evolution of the variety which has been registered under this Act, it shall report its findings to the Authority.

When the Authority, on a report under sub-section (2) is satisfied, after such inquiry as it may deem fit, that the variety with which the report is related has been registered under the provisions of this Act, it may issue notice in the prescribed manner to the breeder of that variety and after providing opportunity to such breeder to file objection in the prescribed manner and of being heard, it may subject to any limit notified by the Central Government, by order, grant such sum of compensation to be paid to a person or group of persons or governmental or non-governmental organisation which has made claim under sub-section (1), as it may deem fit.

Any compensation granted under sub-section (3) shall be deposited by the breeder of the variety in the Gene Fund.

The compensation granted under sub-section (3) shall be deemed to be an arrear of land revenue and shall be recoverable by the Authority accordingly.

Protection of innocent infringement

Section 42 states that notwithstanding anything contained in this Act,-

- (i) a right established under this Act shall not be deemed to be infringed by a farmer who at the time of such infringement was not aware of the existence of such right; and
- (ii) a relief which a court may grant in any suit for infringement referred to in section 65 shall not be granted by such court, nor any cognizance of any offence under this Act shall be taken, for such infringement by any court against a farmer who proves, before such court, that at the time of the infringement he was not aware of the existence of the right so infringed.

Authorisation of farmers' variety

Notwithstanding anything contained in sub-section (6) of section 23 and section 28, where an essentially derived variety is derived from a farmers' variety, the authorisation under sub-section (2) of section 28 shall not be given by the breeder of such farmers' variety except with the consent of the farmers or group of farmers or community of farmers who have made contribution in the preservation or development of such variety. (Section 43)

Exemption from fees

A farmer or group of farmers or village community shall not be liable to pay any fees in any proceeding before the Authority or Registrar or the High Court under this Act or the rules made thereunder.

Explanation.—For the purposes of this section, “fees in any proceeding” includes any fees payable for inspection of any document or for obtaining a copy of any decision or order or document under this Act or the rules made thereunder. (Section 44)

Gene Fund

The Central Government shall constitute a Fund to be called the National Gene Fund and there shall be credited thereto –

- (a) the benefit sharing received in the prescribed manner from the breeder of (25 of 1961) variety or an essentially derived variety registered under this Act, or propagating material of such variety or essentially derived variety, as the case maybe;
- (b) the annual fee payable to the Authority by way of royalty under sub-section (1) of section 35;
- (c) the compensation deposited in the Gene Fund under sub-section (4) of section 41;
- (d) the contribution from any national and international organisation and other sources.

The Gene Fund shall, in the prescribed manner, be applied for meeting--

- (a) any amount to be paid by way of benefit sharing under sub-section (5) of section 26;
- (b) the compensation payable under sub-section (3) of section 41;
- (c) the expenditure for supporting the conservation and sustainable use of genetic resources including *in-situ* and *ex-situ* collections and for strengthening the capability of the Panchayat in carrying but such conservation and sustainable use;
- (d) the expenditure of the schemes relating to benefit sharing framed under section 46. (Section 45)

Framing of schemes, etc.

Section 46 states that the Central Government shall, for the purposes of section 41 and clause (d) of sub-section (2) of section 45, frame, by notification in the Official Gazette, one or more schemes.

In particular, and without prejudice to the generality of the provisions of sub-section (7), the scheme may provide for all or any of the following matters, namely-

the registration of the claims for the purposes of section 41 under the scheme and all matters connected with such registration;

the processing of such claims for securing their enforcement and matters connected therewith;

the maintenance of records and Registers in respect of such claims;

the utilisation, by way of disbursal (including apportionment) or otherwise, of any amounts received in satisfaction of such claims;

the procedure for disbursal or apportionment by the Authority in the event of dispute regarding such claims;

the utilisation of benefit sharing for the purposes relating to breeding, discovery or development of varieties;

the maintenance and audit of accounts with respect to the amounts referred to in clause (d).

COMPULSORY LICENCE

The provisions regarding Compulsory License are contained in Chapter VII ranging from Section 47 to Section 53 of the Protection of Plant Varieties and Farmers-Rights Act, 2001.

Power of Authority to make order for compulsory licence in certain circumstances

According to Section 47, at any time, after the expiry of three years from the date of issue of a certificate of registration of a variety, any person interested may make an application to the Authority alleging that the reasonable requirements of the public for seed or other propagating material of the variety have not been satisfied or that the seed or other propagating material of the variety is not available to the public at a reasonable price and pray for the grant of a compulsory licence to undertake production, distribution and sale of the seed or other propagating material of that variety.

Every application under sub-section (1) shall contain a statement of the nature of the applicant's interest together with such particulars as may be prescribed and the facts upon which the application is based.

The Authority, after consultation with Central Government, and if satisfied after giving an opportunity to the breeder of such variety, to file opposition and after hearing the parties, on the issue that the reasonable

requirements of the public with respect to the variety have not been satisfied or that the seed or other propagating material of the variety is not available to the public at a reasonable price, may order such breeder to grant a licence to the applicant upon such terms and conditions as it may deem fit and send a copy of such order to the Registrar to register the title of such applicant as licensee under sub-section (4) of section 28 on payment of such fees by the applicant as is referred to in that sub-section.

Adjournment of application for grant of compulsory licence

If the breeder of a variety registered under this Act in respect of which any application has been pending before the Authority under section 47 makes a written request to the Authority on the ground that due to any reasonable factor, such breeder has been unable to produce seed or other propagating material of the variety on a commercial scale to an adequate extent till the date of making such request, the Authority may, on being satisfied that the said ground is reasonable, adjourn the hearing of such application for such period not exceeding twelve months in aggregate as it may consider sufficient for optimum production of the seed or propagating material of such variety, as the case may be, by such breeder.

No adjournment of the application under sub-section (1) shall be granted unless the Authority is satisfied that the breeder of the variety registered under this Act in respect of which such application is made, has taken immediate measures to meet the reasonable requirements of the public for the seed or other propagating material of such variety. (Section 49)

Duration of compulsory licence

The Authority shall determine the duration of the compulsory licences granted under this Chapter and such duration may vary from case to case keeping in view the gestation periods and other relevant factors but in any case it shall not exceed the total remaining period of the protection of that variety and when a compulsory licence is granted the prescribed authority shall, in the prescribed manner make available to the licensee of such compulsory licence, the reproductive material of the variety relating to such compulsory licence stored in the National Gene Bank or any other centre. (Section 50)

Authority to settle terms and conditions of licence

Section 51 states that the Authority shall, while determining the terms and conditions of a compulsory licence under the provisions of this Chapter, endeavour to secure—

- i. reasonable compensation to the breeder of the variety relating to the compulsory licence having regard to the nature of the variety, the expenditure incurred by such breeder in breeding the variety or for developing it, and other relevant factors;
- ii. that the compulsory licensee of such variety possesses the adequate means to provide to the farmers, the seeds or its other propagating material of such variety timely and at reasonable market price.

No compulsory licence granted by the Authority shall authorise the licensee to import the variety relating to such licence or any seed or other propagating material of such variety from abroad where such import would constitute an infringement of the rights of the breeder of such variety.

Revocation of compulsory licence

The Authority, may on its own motion or on application from an aggrieved person made to it in the prescribed form, if it is satisfied that a compulsory licensee registered under this Chapter has violated any terms or conditions of his licence or it is not appropriate to continue further such licence in public interest, it may after giving such licensee an opportunity to file opposition and of being heard make order to revoke such licence.

When a licence is revoked under sub-section (1) by an order of the Authority, the Authority shall send a copy of such order to the Registrar to rectify the entry or correct the Register relating to such revocation and the Registrar shall rectify the entry or correct the Register accordingly. (Section 52)

APPEALS

The provisions regarding Appeals are contained in Chapter VIII ranging from Section 56 & 57 Protection of Plant Varieties and Farmers-Rights Act, 2001.

Appeals to High Court

As per Section 56, an appeal shall be preferred to the High Court within the prescribed period from any—

- a. order or decision of the Authority or Registrar, relating to registration of a variety; or
- b. order or decision of the Registrar relating to registration as an agent or a licensee of a variety; or
- c. order or decision of the Authority relating to claim for benefit sharing; or
- d. order or decision of the Authority regarding revocation of compulsory licence or modification of compulsory licence; or
- e. order or decision of the Authority regarding payment of compensation, made under this Act or rules made thereunder.

Every such appeal shall be preferred by a petition in writing and shall be in such form and shall contain such particulars as may be prescribed.

Order of High Court

According to Section 57, the High Court may, after giving both the parties to the appeal an opportunity of being heard, pass such orders thereon as it thinks fit. The High Court may, at any time within thirty days from the date of the order, with a view to rectifying the mistake apparent from the record, amend any order passed by it under sub-section (1), and make such amendment if the mistake is brought to its notice by the appellant or the opposite party.

In every appeal, the High Court may, where it is possible, hear and decide such appeal within a period of one year from the date of filing of the appeal. The High Court shall send a copy of any order passed under this section to the Registrar

INFRINGEMENT, OFFENCES, PENALTIES AND PROCEDURE

The provisions regarding Infringement, Offences, Penalties and Procedure are contained in Chapter X ranging from section 64 to 77 of Protection of Plant Varieties and Farmers-Rights Act, 2001.

Infringement

Subject to Section 64, a right established under this Act is infringed by a person-

who, not being the breeder of a variety registered under this Act or a registered agent or a registered licensee of that variety, sells, exports, imports or produces such variety without the permission of its breeder or within the scope of a registered licence or registered agency without permission of the registered licensee or registered agent, as the case may be;

who uses, sells, exports, imports or produces any other variety giving such variety, the denomination identical with or deceptively similar to the denomination of a variety registered under this Act in such manner as to cause confusion in the mind of general people in identifying such variety so registered.

Suit for infringement, etc.

As per Section 65, no suit -

- (a) for the infringement of a variety registered under this Act; or
- (b) relating to any right in a variety registered under this Act, shall be instituted in any court inferior to a District Court having jurisdiction to try the suit.

For the purposes of clauses (a) and (b) of sub-section (1), "District Court having jurisdiction" shall mean the District Court within the local limits of whose jurisdiction the cause of action arises.

Relief in suit for infringement

The relief which a court may grant in any suit for infringement referred to in section 65 includes an injunction and at the option of the plaintiff, either damages or a share of the profits.

The order of injunction under sub-section (1) may include an *ex parte* injunction or any interlocutory order for any of the following matters, namely:-

- (a) discovery of documents;
- (b) preserving of infringing variety or documents or other evidence which are related to the subject-matter of the suit,
- (c) attachment of such property of the defendant which the court deems necessary to recover damages, costs or other pecuniary remedies which may be finally awarded to the plaintiff. (Section 66)

Opinion of scientific adviser

According to Section 67, when the court has to form an opinion upon any question of fact or a scientific issue, such court may appoint an independent scientific adviser to suggest it or to inquire into and report upon the matter to enable it to form the desired opinion.

The scientific adviser may be paid such remuneration or expenses as the court may fix.

OFFENCES, PENALTIES AND PROCEDURE**Prohibition to apply denomination of registered variety**

Section 68 provides that no person other than the breeder of a variety registered under this Act or a registered licensee or a registered agent thereof shall use the denomination of that variety in the manner as may be prescribed.

A person shall be deemed to apply the denomination of a variety registered under this Act who –

- (a) applies it to the variety itself; or
- (b) applies it to any package in or with which the variety is sold, or exposed for sale, or had in possession such package for sale or for any purpose of trade or production; or
- (c) places, encloses or annexes the variety which is sold, or exposed for sale, or had in possession for sale or for any purpose of trade or production, in or with any package or other thing to which the denomination of such variety registered under this Act has been applied; or
- (d) uses the denomination of such variety registered under this Act in any manner reasonably likely to lead to the belief that the variety or its propagating material in connection with which it is used is designated or described by the denomination; or

- (e) in relation to the variety uses such denomination in any advertisement, invoice, catalogue, business letter, business paper, price list or other commercial document and such variety is delivered to a person in pursuance of a request or order made by reference to the denomination as soused.

A denomination shall be deemed to be applied to a variety whether it is woven in, impressed on, or otherwise worked into, or annexed or affixed to, such variety or to any package or other thing.

Meaning of falsely applying denomination of a registered variety

As per Section 69, a person shall be deemed to falsely apply the denomination of a variety registered under this Act who, without the assent of the breeder of such variety,—

- (a) applies such denomination or a deceptively similar denomination to any variety or any package containing such variety;
- (b) uses any package bearing a denomination which is identical with or deceptively similar to the denomination of such variety registered under this Act, for the purpose of packing, filling or wrapping therein any variety other than such variety registered under this Act.

Any denomination of a variety registered under this Act falsely applied as mentioned in sub-section (1), is in this Act referred to as false denomination.

In any prosecution for falsely applying a denomination of a variety registered under this Act the burden of proving the assent of the breeder of such variety shall lie on the accused.

Penalty for applying false denomination, etc.

Section 70 states that any person who –

- (a) applies any false denomination to a variety; or
- (b) indicates the false name of a country or place or false name and address of the breeder of a variety registered under this Act in the course of trading such variety,

shall, unless he proves that he acted, without intent to defraud, be punishable with imprisonment for a term which shall not be less than three months but which may extend to two years, or with fine which shall not be less than fifty thousand rupees but which may extend to five lakh rupees, or with both.

Penalty for selling varieties to which false denomination is applied, etc.

As per section 71, any person who sells, or exposes for sale, or has in his possession for sale or for any purpose of trade or production of any variety to which any false denomination is applied or to which an indication of the country or place in which such variety was made or produced or the name and address of the breeder of such variety registered under this Act has been falsely made, shall, unless he proves –

- (a) that having taken all reasonable precautions against committing an offence against this section, he had at the time of commission of the alleged offence no reason to suspect the genuineness of the denomination of such variety or that any offence had been committed in respect of indication of the country or place in which such variety registered under this Act, was made or produced or the name and address of the breeder of such variety;
- (b) that, on demand by or on behalf of the prosecutor, he gave all the information in his possession with respect to the person from whom he obtained such variety; or
- (c) that otherwise he had acted innocently;

be punishable with imprisonment for a term which shall not be less than six months but which may extend to two years, or with fine which shall not be less than fifty thousand rupees but which may extend to five lakh rupees, or with both.

Penalty for falsely representing a variety as registered

According to section 72, whoever makes any representation with respect to the denomination of a variety or its propagating material or essentially derived variety or its propagating material not being variety or its propagating material or essentially derived variety or its propagating material registered under this Act, to the effect that it is a variety or its propagating material or essentially derived variety or its propagating material registered under this Act or otherwise represents any variety, or its propagating material, or essentially derived variety or its propagating material not registered under this Act to the effect that it is registered under this Act shall be punishable with imprisonment for a term, which shall not be less than six months but which may extend to three years, or with fine which shall not be less than one lakh rupees but which may extend to five lakh rupees, or with both.

Penalty for subsequent offence

Section 73 states that whoever, having already been convicted of an offence under this Act is again convicted of such offence shall be punishable for the second and for every subsequent offence with imprisonment for a term which shall not be less than one year but which may extend to three years, or with fine which shall not be less than two lakh rupees but which may extend to twenty lakh rupees, or with both.

Procedure where invalidity of registration is pleaded by the accused

Where the offence charged under this Act is in relation to a variety or its propagating material or essentially derived variety or its propagating material registered under this Act and the accused pleads that the registration of such variety or its propagating material or essentially derived variety or its propagating material, as the case may be, is invalid and the court is satisfied that such offence is prima facie not tenable, it shall not proceed with the charge but shall adjourn the proceedings for three months from the date on which the plea of the accused is recorded to enable the accused to file an application before the Registrar under this Act for the rectification of the Register on the ground that the registration is invalid.

If the accused proves to the court that he has made such application within the time so limited or within such further time as the court for sufficient cause allow, the further proceedings in the prosecution shall stand stayed till the disposal of such application for rectification.

If within a period of three months or within such extended time as may be allowed by the court, the accused fails to apply to the Registrar for rectification of the Register, the court shall proceed with the case as if the registration were valid.

Where before institution of a complaint of an offence referred to in sub-section (1), any application for the rectification of the Register concerning the registration of the variety or its propagating material or essentially derived variety or its propagating material, as the case may be, in question on the ground of invalidity of such registration has already been properly made to and is pending before the Registrar, the court shall stay the further proceedings in the prosecution pending the disposal of the application aforesaid and shall determine the charge against the accused in conformity with the result of the application for rectification. (Section 76)

Offences by companies

If the person committing an offence under this Act is a company, the company as well as every person in charge of, and responsible to, the company for the conduct of its business at the time of the commission of the offence shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly:

Provided that nothing contained in this sub-section shall render any such person liable to any punishment, if he proves that the offence was committed without his knowledge or that he had exercised all due diligence to prevent the commission of such offence.

Notwithstanding anything contained in sub-section (7), where an offence under this Act has been committed by a company and it is proved that the offence has been committed with the consent or connivance of, or that the

commission of the offence is attributable to any neglect on the part of any director, manager, secretary or other officer of the company, such director, manager, secretary or other officer shall also be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly. (Section 77)

Explanation.—For the purposes of this section,—

- (a) “company” means any body corporate and includes a firm or other association of individuals; and
- (b) “director”, in relation to a firm, means a partner in the firm.

INTERNATIONAL TREATIES AND CONVENTION

International Union for Protection of New Plant Varieties (UPOV Convention)

The International Union for the Protection of New Varieties of Plants (UPOV) is an intergovernmental organization with headquarters in Geneva (Switzerland).

UPOV was established by the International Convention for the Protection of New Varieties of Plants. The Convention was adopted in Paris in 1961 and it was revised in 1972, 1978 and 1991.

UPOV’s mission is to provide and promote an effective system of plant variety protection, with the aim of encouraging the development of new varieties of plants, for the benefit of society.

The aim of the UPOV system is encourage breeding of new plant varieties for all types of farmers. The “Seminar on Plant Variety Protection and Technology Transfer: the Benefits of Public-Private Partnership” and the “Symposium on the Benefits of Plant Variety Protection for Farmers and Growers” demonstrated, for example, the way in which plant breeders’ rights have been used by the public sector to transfer new varieties to both commercial and resource-poor farmers.

The goal of UPOV is to guarantee strong plant safety measures that will allow for the development of novel plant varieties that will benefit society. The UPOV Convention establishes the foundation for people to support plant raising by granting producers of new plant varieties a licenced innovation right.

When a raiser’s accuracy is used to guarantee an assortment, it is necessary to obtain the reproducer’s permission before using the assortment for commercial reasons. The individual UPOV members renounce their right to reproduce. That new plant assortment can only be guaranteed through the reproduction of another plant assortment. Insurance for a variety cannot be obtained by anybody other than the raiser.

Under the UPOV framework, there are no restrictions on who can be seen as a reproducer; a raiser may be an individual, a farmer, an analyst, an open organization, a privately owned firm, etc. India is not an exclusive member though.

The UPOV system encourages the development of new varieties of plants, therefore adding to diversity. The “breeder’s exemption” in the UPOV Convention enables plant diversity to be available for further breeding activities because acts done for the purpose of breeding other varieties are not subject to any restriction by the breeder. This reflects the fact that access to protected varieties contributes to sustain greatest progress in plant breeding and, thereby, to maximize the use of genetic resources for the benefit of society.

TRIPS Agreement

As a whole, Article 27 of the TRIPS Agreement defines which inventions governments are obliged to make eligible for patenting, and what they can exclude from patenting. Inventions that can be patented include both products and processes, and should generally cover all fields of technology.

Broadly speaking, part (b) of paragraph 3 (i.e. Article 27.3(b)) allows governments to exclude some kinds of inventions from patenting, i.e. plants, animals and “essentially” biological processes (but micro-organisms, and non-biological and microbiological processes have to be eligible for patents). However, plant varieties have to

be eligible for protection either through patent protection or a system created specifically for the purpose (“*sui generis*”), or a combination of the two.

Doha Declaration

The 2001 Doha Declaration made it clear that work in the TRIPS Council under the reviews (Article 27.3(b) or the whole of the TRIPS Agreement under Article 71.1) and on outstanding implementation issues should cover:

- the relationship between the TRIPS Agreement and the UN Convention on Biological Diversity (CBD);
- the protection of traditional knowledge and folklore; and
- other relevant new developments that member governments raise in the review of the TRIPS Agreement.

It adds that the TRIPS Council’s work on these topics is to be guided by the TRIPS Agreement’s objectives (Article 7) and principles (Article 8), and must take development issues fully into account.

CASE LAWS

Pan Seeds Pvt. Ltd. vs. Ramnagar Seeds Farm Pvt. Ltd. and Ors. F.M.A.T 11 of 2023 CAN 1 of 2023, Calcutta High Court dated June 09, 2023.

Facts:

On 23rd August, 2010 the appellant made an application for registration of the seed of the plant variety PAN 804 before the Registrar under the PPVFR Act. They claim that the variety is genetically related to the RASI variety whose stigma is purple. The distinguishable feature of their variety is the white stigma.

This variety was tested by the Registrar under Section 19 and the Protection of Plant Varieties and Farmers’ Rights Regulations, 2006 and the Protection of Plant Varieties and Farmers Rights (Criteria for Distinctiveness, Uniformity and Stability for Registration) Regulations, 2009 to check its “distinctiveness, uniformity and stability (DUS)”. DUS testing is a way of determining whether a newly bred variety differs from existing varieties in the same species and whether those differing in characteristics, are well-known over two successive growing seasons.

Thereafter, the appellant’s application was advertised on 19th September, 2017 by the registry under Section 21 inviting opposition. No opposition was filed by anybody. After considering the application, the Registrar issued a registration certificate to them on 28th March, 2018. Initially, the registration was valid for 6 years till 28th March, 2023. It was renewable after expiry of that period in accordance with the provisions of the PPVFR Act. Earlier, on 2nd March, 2009 the appellant obtained registration of its trademark ‘JAMUN’. They also obtained registration of the mark ‘PAN 804, JAMUN’ on 12th August, 2016, both under the Trade Marks Act, 1999.

The appellant says that the respondents are using, selling and producing a variety of seeds under the name JAMUN and DURONTO which is identical to theirs. The identity lies in the colour of the stigma, which is white in both cases. The respondents are thus guilty of infringement of the exclusive right of the appellant, acquired by them on registration of their variety.

Issue:

Whether the respondents are guilty of infringement of the exclusive right of the appellant, acquired by them on registration of their variety?

Held:

If the civil courts had the power to adjudge the validity of registration of a variety, it could have only gone into the question *prima facie* at the motion stage. The final adjudication, would determine the ultimate validity. The intention of the legislature is otherwise. Section 89 of PPVFR Act like its corresponding Section 93 in the Trade Marks Act, 1999 imposes a bar on the civil courts to determine any matter over which the authority or the Registrar has jurisdiction.

Once a plant variety is registered under Section 24, it is not subject to the test of validity by the civil courts. If it is not so subject, even prima facie it could not have gone into that question.

In my opinion, once the appellant has been able to register its variety, it is entitled to protect it by restraining others from growing, selling, marketing or otherwise dealing with the said variety. The court could only go into the question whether the appellant and the respondents' varieties were similar, for the purpose of consideration whether injunction should be granted. In my opinion, it is an admitted fact that the two varieties are similar and an injunction ought to have been granted.

Where a court is concerned with an application for grant of an interim order, the respondent does not have a chance to use an affidavit, at that point of time, to resist the order. The courts do permit and rightly so, the respondent to rely upon whatever documents he has in his possession to resist the interim order.

However, if on the basis of such documents, the appellant's prima facie case was demolished, in the eyes of the court and the interim application liable to be dismissed, which the court ultimately did, the learned judge ought to have given an opportunity to the appellant to deal with those documents. Also, solely relying on the documents produced by the respondents without an opportunity to the appellant to deal with them, was violation of the principles of natural justice and fairness.

Nuziveedu Seeds Pvt. Ltd. vs. The Protection of Plant Variety and Farmers Rights Authority and Ors and other connected matters, W.P.(C) 4312/2014, W.P.(C)-IPD 8/2022, W.P.(C)-IPD 10/2022, W.P.(C)-IPD 9/2022 & W.P.(C)-IPD 4/2023, Delhi High Court dated November 30, 2023.

Facts:

All the petitions are related to the applications filed by various applicants seeking registration of new plant varieties stated to have been developed by them, under the Protection of Plant Varieties and Farmers' Rights Act, 2001 (hereinafter "the PPV Act").

An application for registration of a plant variety, once filed, has to be accepted and advertised. After advertisement, persons who desire to oppose the registration of the plant variety may file their oppositions to the application. Depending on the outcome of the opposition, the plant variety either proceeds to registration, or the application for registration is rejected.

Matter pertained to declaring the action of the respondents in not implementing the provisions of Protection of Plant Varieties and Farmers' Rights Act, 2001 & Protection of Plant Varieties and Farmers' Rights Rules, 2003 and in not causing a proper and detailed publication of advertisement as stipulated under the Act and in not carrying out "DUS" tests prior to inviting objections and in not bringing clarity with regard to essentially derived varieties at their registration prior to registration of new varieties as illegal, arbitrary, unconstitutional and violative of the provisions of the Protection of Plant Varieties and Farmers' Rights Act, 2001 & Protection of Plant Varieties and Farmers' Rights Rules, 2003.

Issue:

The principal grievance of the petitioner in these cases is that the applications of the private respondents ought not to have been advertised, before DUS (Distinctiveness, Uniformity and Stability) testing of the concerned plant varieties was undertaken in terms of Section 19 of the PPV Act.

Held:

Farmers' rights, therefore, are a pre-eminent consideration that has to guide the approach of the court while administering the provisions of the PPV Act.

The PPV Act, therefore, aims at striking a balance between the rights of farmers and accelerated agricultural development in the country which requires protection of plant breeders' rights. While harmonising and balancing these rights it is necessary that farmers are given full opportunity to oppose any monopoly which may be created by registering of plant varieties under the PPV Act as new plant varieties. For this purpose, persons who seek to oppose the application seeking registration of new plant varieties under the PPV Act have to be made

aware of all details of the application and details of the purportedly newly developed plant varieties in respect of which registration is sought.

It is obviously for this reason that Section 18 of the PPV Act contains an exhaustive and comprehensive list of the details which are required to be submitted with every application. While examining the nature of the information which is required to be submitted in accordance with

In fact, Section 24(1)(a) is itself a clear indicator of the legislative intent that DUS testing must precede advertisement of the application. To hold that DUS testing need not precede advertisement of the plant variety and that, even after advertisement, DUS testing could be conducted and registration refused if the test result is adverse, would, therefore, entirely rewrite the statutory scheme. Section 18 of the PPV Act, the Court has to be guided by the preambular provisions of the Act, and the necessity of protecting farmers' rights.

The merits of the application as well as the oppositions of these petitions would be holistically concerned by the Registrar, who is directed to take a decision in the matter as expeditiously as possible.

Pioneer Overseas Corporation vs. Chairperson, Protection of Plant Varieties and Farmers Rights and Ors W.P.(C) 6470/2013 & CM No. 14085/2013 and Pioneer Overseas Corporation vs. Union of India and Ors. W.P.(C) 6208/2014 & CM No. 15019/2014 (dated 1.07.2019)

Facts:

The petitioner (hereafter 'Pioneer') is a wholly owned subsidiary of Pioneer Hi-Bred International Inc., company incorporated in United States of America. Pioneer claims that it is involved in the business of research, development, breeding, production and marketing of plant varieties since the year 1926. Respondent no.2 (Kaveri Seeds Limited- hereafter 'Kaveri') is also involved in the business of research, development, breeding of seeds and plant varieties.

The controversy involved in the present petitions relates to the acceptance of Kaveri's application for registration of a variety of maize, referred to as KMH50 under the Protection of Plant Varieties and Farmers' Rights Act, 2001 (hereafter 'the Act'). Pioneer claims that KMH50 is identical/similar to its variety of maize referred to as 30V92. Pioneer has also filed an application for registration of 30V92 under the Act. Pioneer had filed an opposition to Kaveri's application for registration of KMH50 under the Act.

Pioneer has also filed an application with Protection of Plant Varieties and Farmers' Rights Authority (hereafter 'the Authority') under Section 24(5) of the Act, inter alia, claiming that KMH50 was identical to 30V92 and the two varieties are one and the same and further alleging that Kaveri had misappropriated the germplasm of 30V92 under the denomination KMH50. Pioneer had also filed an application for conducting special test (DNA Test) for determining the genetic profile of KMH50 and 30V92 in support of its claim that Kaveri was abusing the provisions of the Act.

Pioneer's application for conducting special test was rejected by the Registrar, Protection of Plant Varieties and Farmers' Rights Authority (hereafter 'Registrar') by an order dated 27.08.2013 on the sole ground that the two varieties of maize (KMH50 and 30V92) were found to conform to the criteria of distinctiveness, uniformity and stability pursuant to the tests conducted in this regard (hereafter 'DUS'). According to the Registrar, a special test as sought for by Pioneer was permissible only if DUS test had failed; that is, the test failed to establish that the plant varieties conform to the DUS criteria. Since, the Authority was of the view that the DUS test was successful, it rejected the Pioneer's application for conducting special test.

Pioneer also impugns an order dated 9th September, 2014, whereby its opposition to Kaveri's application (application no. E2ZM40916 - KMH50) for registration of KMH50 was closed and Kaveri's variety KMH50 was directed to be registered subject to satisfying other conditions.

Held:

Court stated that-

"The Registrar's view that the objections regarding DUS test ought to be made by making a representation on inspection of the variety while the DUS test is being conducted, is erroneous. As discussed earlier, the question

of raising objections arises only after the application has been accepted, which is post the variety being found to conform to the DUS criteria. In terms of Rule 30(2) of the 2003 Rules, such advertisement would also include information as to the place where the candidate variety can be inspected. It is at that stage that an opponent has the opportunity to inspect the variety and, if necessary, point out errors in the DUS Test report by filing an opposition.

Secondly, the Registrar would also be required to consider whether the statements made by Kaveri in its application were correct. Pioneer had alleged in its application under Section 24(5) of the Act that Kaveri had misappropriated the Germplasm in its submissions before the Registrar, however, the Registrar had not considered the same only on the ground that KMH-50 had qualified the DUS Test. Kaveri had filed an application claiming to be the Breeder/successor of the Breeder of KMH-50 and Pioneer had, in effect, claimed Breeder's right in opposition to such registration. However, the same was also not considered by the Registrar.

In other words, if the DUS test result does not indicate that the candidate variety is distinguishable in one essential characteristic from the reference varieties, it is open for the applicant to request for a special test to establish that the candidate variety is distinct. Rule 29 has no application in a case where an opponent request for a special test to establish its allegation that germplasm of the candidate variety is identical to another variety over which the opponent claims a breeder's right. Rule 29 does not preclude any person opposing the registration of a variety or contesting the registration of a variety to seek a special test to establish that the candidate variety is not registrable or that the claims made in the application for such registration are false. In the present case, Pioneer had filed the application for a DNA test in support of its petition under Section 24(5) of the Act, wherein it was asserted that Kaveri had misappropriated the germplasm of 30V92. Plainly, the said application could not have been rejected on account of the provision of Section 19 of the Act or Rule 29 of the 2003 Rules.

The contention that an application for DNA testing could not be maintainable in cases where the DUS test was successful, is also erroneous. The genetic structure of the seed determines its physical manifestation. The genotype is manifested by the physical traits (phenotype) of the organism. It is difficult to accept that two seeds with the identical genotype would have stable different characteristics. The physical characteristics of an organism is an expression of its genome. It is also necessary to note that the expression "essential characteristics", as defined under Section 2(h) of the Act, also means heritable traits of a plant variety which is determined by the expression of one or more genes or other heritable determinants. It necessarily follows that if a variety is distinct within the meaning of Section 15(3)(b) of the Act - that is, it is distinguishable by at least one essential characteristic from any other variety - it would necessarily follow that its genotype is also different particularly in respect of the gene, that is, manifested by that essential characteristic. Thus, the importance of examining the genotype of a plant in order to determine whether it is distinct cannot be brushed aside when one party seeks to contest the same, merely on the ground that DUS test conducted under Section 19 of the Act is successful. This Court is also unable to concur with the view that conduct of a DNA testing would be futile in cases where there is a serious dispute as to the IPR rights regarding the variety.

The orders affirming Kaveri's KMH-50's eligibility for registration under the Plant Varieties Act of 2001 are overturned by the High Court. The Registrar, Protection of Plant Varieties and Farmers' Rights Authority has returned Pioneer's application for conducting the special test in the nature of DNA profiling of the varieties 30V92 and KMH-50 to the file for future consideration."

Pepisco vs. Gujarat Farmers (also known as Pepsico vs. Bipin Patel & Ors.)

The plaintiff has instituted the present suit for seeking permanent injunction to restrain infringement of plant variety registered under the provisions of the Protection of Plant Varieties and Farmers' Rights Act, 2001 ('the said Act' for short) and passing off.

The plaintiff is the registered breeder of the potato plant variety 'FL 2027' (commercial name FC5) which is registered under the provisions of the said Act. The said registration was granted to the plaintiff on 1st February, 2016 and is valid and subsisting as on date. The Learned Counsel for the plaintiff has further submitted that the Registered Variety of potatoes breeds are being used by the plaintiff for manufacturing potato chips which

are sold under the popular brand name/trade mark LAY'S. The Learned Counsel for the plaintiff has further submitted that the defendant has been illegally growing, producing, selling without permission of the plaintiff, such Variety in violation of the plaintiffs' statutory right granted under sections 64 and 65 of the said Act. The Learned Counsel for the plaintiff has further submitted that the defendant is violating the right of the plaintiff as granted under sections 64 and 65 of the said Act. He has further submitted that the Registered Variety is the hybrid of FL 1867 and Wischip varieties. In the year 1999, the denomination FL 2027 was coined and assigned to the said variety. In India, the Registered Variety was first put to commercial use in 2009 and has been traded under the trademark FC5 by the plaintiff. The plaintiff filed application for registration of the Variety as a 'new variety' with the plant Variety Registry on 2nd February, 2012 and the plaintiff has been granted registration by the Plant Variety Registry and the plaintiff has placed the same at Mark 4/1. The Learned Counsel for the plaintiff has further submitted that the plaintiff has granted license to some farmers, firstly in Punjab to bring potatoes of the said Variety on the buyback system. In January 2019, it came to the knowledge of the plaintiff that the defendant has started the production of the Variety of the potatoes by infringing the right of the plaintiff under the said Act.

The plaintiff as well as the laboratory at Shimla have pointed out that the DNA of the samples collected by the plaintiff from the premises of the defendant, are matched with the DNA of the plaintiff's potato. Consequently, PepsiCo was given an ex-parte ad-interim injunction by order dated April 8, 2019, preventing the farmers from growing and selling the PepsiCo-registered variety's produce until the next hearing, on April 26. However, this was the first time a farmer in Gujarat was discovered to be in possession of the variety that was supposedly registered with PepsiCo. PepsiCo was known to have agreements with farmers in Punjab for cultivation of the relevant variety under the buyback scheme.

The truth is that PepsiCo applied for registration of the variety as a "new variety" on February 2, 2012, and was subsequently approved by the Plant Variety Registry. This essentially made PepsiCo the variety's registered owner. On the other hand, the farmers who are being sued contend that they purchased the potato seeds on the so-called "grey market," where they were able to find them locally. The potato variety was launched in India in 2011, but it wasn't registered until five years later, in 2016, according to agricultural activists. As a result, it is only natural that it spread among farmers who don't have a contract with the corporation, they claim.

PepsiCo cited Section 64, which states that a right established under this Act is violated when a person who is not the breeder, registered agent, or licensee sells, exports, imports, or produces a variety without the breeder's consent and does so in a way that confounds the public. Unprocessed potato produce, which is the raw material needed to make Lay's chips, or potato seeds (to be grown), which are now unknown, may have been sold by the farmers.

Another intriguing fact to consider is that farmers assert protection under Section 39 (1) (iv), asserting that the seed was already on the market a long time before PepsiCo registered it. This begs the question of why PepsiCo took action in 2019 when it could have started much earlier.

The firm apparently dismissed all of their claims against the farmers on May 10th as a result of tremendous pressure from its headquarters, the Indian public, and political parties.

Maharashtra Hybrid Seed Co. vs. Union of India and Anr on 9 January, 2015 W.P.(C) 4330, 4365, 4366, 6199 & 7853 of 2012

Facts:

The petitioners impugn a common order passed by the Registrar, Protection of Plant Varieties and Farmers' Rights Authority holding that parent lines of known hybrid varieties, could not be registered as "new" plant varieties under the Protection of Plant Varieties and Farmers' Rights Act, 2001 (hereafter the 'Act'). It was held that if the hybrid falls under the category of extant variety about which there is common knowledge then its parental lines cannot be treated as novel.

The learned counsel for the petitioners contended that the hybrid seeds, obtained from crossing the parental lines, are distinct in traits and characteristics from the parent lines and cannot be considered as propagating or harvested material of the parental line varieties. It was contended that the propagating/harvested material

of a variety would mean any part of a plant or seed, which is capable of regeneration into a plant having same characteristics as the original plant. Since regeneration of hybrid seed would not result in the parental lines but the hybrid plant variety that is distinct from the parent line varieties, the hybrid seeds obtained from crossing of parent lines could not be said to be propagating or harvested material of the parental lines.

It was submitted on behalf of the petitioners that a 'variety' is defined 'by the expression of the characteristics' and as the characteristics of the hybrid variety are different from the parental line, the parent lines could not be considered the same as the hybrid variety.

The learned counsel for the interveners submitted that the Act did not require that the harvested material of a variety should also be a variety in itself or that it should be able to reproduce the parent variety. He further submitted that the distinction sought to be drawn between the US/ European laws and the Act was erroneous. The learned counsel for the interveners contended that the word 'deemed' could not, in all cases, be read to create a legal fiction and in some cases, may also be used to mean what is obvious. He relied upon the decision of the Supreme Court in *Consolidated Coffee Ltd. and Anr. v. Coffee Board, Bangalore: (1980) 3 SCC 358* in support of his contention.

Issues:

Whether the parent lines of extant hybrid varieties can be considered as novel plant varieties for the purposes of registration under the Act?

Held:

Court held that-

"The parent lines are not sold and only the seeds of the hybrid variety are sold commercially. According to the petitioner, since the parent lines are not commercially sold and their identity is kept secret, the parent lines cannot be considered as "extant variety" within the meaning of Section 2(j) of the Act.

It is settled law that the intention of the Legislature must be discerned from the plain language of a Statute. In my view, the plain language of Section 15(3)(a) of the Act indicates that a variety would be novel if harvested material of a variety has not been sold, or otherwise disposed of prior to the specified period. It would, obviously, follow that the plant would cease to conform to the novelty criteria as required for being registered as a new variety, if the propagating material/harvested material of the variety was sold or otherwise disposed of for the purposes of exploitation of such variety prior to the specified period. Although, the word 'deemed' is used in the opening sentence of Section 15(3) of the Act, the same cannot be read to mean that even if a plant variety does not conform to the conditions of clause (a) of Section 15(3) of the Act it could, nonetheless, be considered as novel.

The word "deemed" in the opening sentence of Section 15(3) of the Act must be read in the context of the legislative intent; a plant variety, the propagating material or harvested material of which is sold or otherwise disposed of within the specified period would be novel but would be precluded from being claimed as novel if sold/otherwise disposed of prior to the specified period.

The expression "exploitation of such variety" need not necessarily be by sale of the plant, or such material of that plant, which is capable of regeneration into the same variety; sale of the harvested material of varieties - in this case the hybrid seed, which would not germinate into either of the parent varieties - would, clearly, be an exploitation of those varieties. According to the petitioners, the parental lines are not sold but used only for producing seeds of hybrid varieties. Indisputably, the sale of such seeds would amount to exploitation of the parental varieties for commercial purposes.

In my view, a plain reading of Section 15(3) of the Act would indicate that if the seeds of parent lines have been commercially sold, the breeders cannot claim the parent lines to be novel. As I see it, even if one was to consider that language of Section 15(3) of the Act was ambiguous on the issue, the same would have to be resolved against the petitioners. This is so because it is well settled that in case of ambiguity in the language of a statute, a purposive interpretation that furthers the intention of the Legislature must be adopted. The legislative intent of the Act is to protect the rights of the farmers and plant breeders. India had ratified

the TRIPS agreement and, therefore, was obliged to protect the intellectual property rights in certain plant varieties. The protection as envisaged under the Act is to provide certain exclusive rights for a specified period of time.

Therefore Court find no reasons to interfere with the impugned order. Accordingly, the petitions are dismissed.”

Monsanto Technology LLC vs. Nuziveedu and Ors. Civil Appeal No. 6472 of 2004

Facts:

The appellants/plaintiffs is seeking permanent injunction against the defendants from using the trademark “BOLGARD” and “BOLGARD II” brand cotton technology, violating the registered patent no. 214436 of the plaintiffs, and also to further restrain the defendants from selling and or using seeds/hybrid seeds bearing the patented technology, infringing the registered patent of the plaintiffs, along with rendition of accounts. The parties shall, for convenience, be referred to by their position in the original suit.

The plaintiffs pursuant to their patent rights had entered into a sub licence agreement dated 21.02.2004 with the defendants for an initial period of ten years. The agreement entitled the defendants to develop “Genetically Modified Hybrid Cotton Planting Seeds” with help of the plaintiffs’ technology and to commercially exploit the same subject to the limitations prescribed in the agreement. The agreement also provided for payment of licence fee/trait value by the defendants, for use of the plaintiffs’ patented technology. The agreement after extension was ultimately terminated by the plaintiffs on 14.11.2015 due to disputes regarding payment of licence fee/trait value in view of subsequent price control regime introduced by the State, and to which the defendants required adherence by the plaintiffs. The plaintiffs filed an application for injunction under Order 39, Rule 1 and 2 of the Code of Civil Procedure, to restrain the defendants from using their registered trade mark in violation of the registered patent during the pendency of the suit in view of the termination of the agreement.

The defendants in their written statement inter alia contended that their rights were protected under the Protection of Plant Varieties and Farmers’ Rights Act, 2001 (hereinafter referred to as ‘the PPVFR Act’). The suit patent was bad because claims 124 were “process claims” concerning genetic engineering or biotechnology method to insert “Nucleic Acid Sequence” (NAS) into a plant cell as in claim 2527 practiced in laboratory conditions, unlike the complete biological process adopted by the defendants. The NAS was a chemical composition incapable of reproducing itself and was thus not a microorganism. Only on insertion into a plant, a living organism, it imparts Bt.trait (insect resistance) to the living organism. The defendants also filed a counter claim no.51 of 2016 seeking revocation of the patent under Section 64 of the Act, as being in violation of Section 3(j) of the Patents Act in respect of plants and seeds that contained DNA sequences, denying any infringement.

Issue:

Whether Section 3(j) of the Patents Act, 1970 prohibit patenting gene sequences that are mentioned in the claims of GM hybrid cotton seed?

Held:

Court stated that -

“We see no reason to reject the submission of Dr. Singhvi that it stands to reason why the plaintiffs would have consented to a summary adjudication of an existing patent and risk losing the same without any merit adjudication. The defendants themselves had contended in their appeal that the issues were complicated requiring expert evidence to be considered in a fullfledged trial. The Division Bench therefore ought to have confined its adjudication to the question whether grant of injunction was justified or unjustified in the facts and circumstances of the case. The Division Bench ought not to have examined the counter claim itself usurping the jurisdiction of the Single Judge to decide unpatentability of the process claims 124 also in the summary manner done. Summary adjudication of a technically complex suit requiring expert evidence also, at the stage of injunction in the manner done, was certainly neither desirable or permissible in the law. The suit involved complicated mixed questions of law and facts with regard to patentability and exclusion of patent which could

be examined in the suit on basis of evidence. Section 64 of the Act provides for revocation of patent based on a counter claim in a suit. It necessarily presupposes a valid consideration of the claims in the suit and the counter claim in accordance with law and not summary adjudication sans evidence by abstract consideration based on text books only.

The Supreme Court ruled that the Division Bench could not depose of the case on a summary basis. The Supreme Court then upheld the Single Judge's judgement and gave it time to elaborately decide the patent case based on expert testimony."

Sungro Seeds Ltd. vs. Union of India, (dated 09.01.2015) W.P.(C) 4330, 4365, 4366, 6199 & 7853 of 2012

Facts:

The petitioners impugn a common order dated 24.05.2012 (hereafter the 'impugned order') passed by the Registrar, Protection of Plant Varieties and Farmers' Rights Authority holding that parent lines of known hybrid varieties, could not be registered as "new" plant varieties under the Protection of Plant Varieties and Farmers' Rights Act, 2001 (hereafter the 'Act'). It was held that if the hybrid falls under the category of extant variety about which there is common knowledge then its parental lines cannot be treated as novel.

The learned counsel for the petitioners contended that the hybrid seeds, obtained from crossing the parental lines, are distinct in traits and characteristics from the parent lines and cannot be considered as propagating or harvested material of the parental line varieties. It was contended that the propagating/harvested material of a variety would mean any part of a plant or seed, which is capable of regeneration into a plant having same characteristics as the original plant. Since regeneration of hybrid seed would not result in the parental lines but the hybrid plant variety that is distinct from the parent line varieties, the hybrid seeds obtained from crossing of parent lines could not be said to be propagating or harvested material of the parental lines.

It was submitted on behalf of the petitioners that a 'variety' is defined 'by the expression of the characteristics' and as the characteristics of the hybrid variety are different from the parental line, the parent lines could not be considered the same as the hybrid variety.

The learned senior counsel for the interveners contended that the hybrid seeds produced by crossing of the parental lines, were the propagating or harvested material of each of the parental lines and the commercial exploitation of such hybrid seeds for more than one year prior to the date of application, would make the parent line ineligible to be registered as a new variety.

The learned counsel for the interveners submitted that the Act did not require that the harvested material of a variety should also be a variety in itself or that it should be able to reproduce the parent variety. He further submitted that the distinction sought to be drawn between the US/ European laws and the Act was erroneous. The learned counsel for the interveners contended that the word 'deemed' could not, in all cases, be read to create a legal fiction and in some cases, may also be used to mean what is obvious.

Issue:

Whether the parent lines of extant hybrid varieties can be considered as novel plant varieties for the purposes of registration under the Act?

Held:

Court held that, a plain reading of Section 15(3) of the Act would indicate that if the seeds of parent lines have been commercially sold, the breeders cannot claim the parent lines to be novel. As I see it, even if one was to consider that language of Section 15(3) of the Act was ambiguous on the issue, the same would have to be resolved against the petitioners. This is so because it is well settled that in case of ambiguity in the language of a statute, a purposive interpretation that furthers the intention of the Legislature must be adopted. The Legislative intent of the Act is to protect the rights of the farmers' and plant breeders. India had ratified the TRIPS agreement and, therefore, was obliged to protect the intellectual property rights in certain plant varieties. The protection as envisaged under the Act is to provide certain exclusive rights for a

specified period of time. By virtue of Section 24(6) of the Act, the registration certificate issued in respect of a plant variety could be extended for a period up to 18 years from the date of registration in case of trees and vines and 15 years from the date of registration in other cases. In the case of extant varieties the validity of the registration certificate can be extended upto 15 years from the notification of that variety under Section 5 of the Seeds Act, 1966. In other words, the Parliament in its Legislative wisdom considered that providing exclusivity as specified under Section 24(6) of the Act was sufficient protection to the plant breeders. If the provisions of Section 15(3) of the Act are read in a manner as suggested by the petitioners, the effect would be to extend that period of protection many times over.

LESSON ROUND-UP

- Several forms of IPRs employed in the sector of agriculture attempts to address this issue. Here it is relevant to mention the prevalent legal mechanisms including patents, plant varieties protection, trademarks, trade secrecy rights and plant breeders' rights.
- India is among the first countries in the world to have passed legislation granting farmers' rights in the form of the Plant Varieties Protection and Farmers' Rights Act, 2001 (PVPFR). India's law is unique in that it simultaneously aims to protect both farmers' and breeders' rights.
- The Indian case assumes immense importance due to the country's lead in establishing a legal framework on Farmers' Rights and also significant as the Indian Gene Centre is recognized for its native wealth of plant genetic resources.
- The Government of India enacted "The Protection of Plant Varieties and Farmers' Rights (PPV&FR) Act, 2001" thereby adopting a sui generis system.
- To implement the provisions of the PPV&FR Act, the Department of Agriculture and Cooperation, Ministry of Agriculture, established a body by the name of 'Protection of Plant Varieties and Farmers' Rights Authority' in the year 2005 itself.
- The impact of bringing into effect, enforce and implement the Protection of Plant Varieties and Farmers' Rights Act, 2001 can be seen in the way it has influenced the seed industry in India.
- Enforcement of legal protection for innovations in plant breeding by the plant breeders and traditional farming communities in producing suitable varieties, producing food, fodder, fibre, fuel and other commodities, provide an incentive for carrying out research, promote trade and regulate use of plant genetic resources.
- The provisions under the Protection of Plant Varieties and Farmers-Rights Act, 2001 on the subject of 'Protection of Plant Varieties and Farmers' Rights, Authority and Registry' are contained in Chapter II (Sections 3 to 13) of the Act.
- The provisions regarding 'Registration of Plant varieties and essentially derived variety' are contained in Chapter III ranging from Section 14 to Section 23 of the Protection of Plant Varieties and Farmers-Rights Act, 2001.
- Criteria for Registration of a Variety are novelty, distinct nature, uniform and stable.
- The PPV&FRA under section 2(j)(iii) and (iv) defines "extant variety" as any variety "which is in public domain or about which there is a common knowledge."
- Farmers' Variety: Under section 2 (l) farmers variety means a variety "which has been traditionally cultivated and evolved by the farmers in their fields".
- The maximum time taken for issuing certificate of registration is three years from the date of filing of the application for registration of a plant variety.

- Duration of Registration:-
 - For trees and vines (Perennials) - 18 years from the date of registration of the variety.
 - For other crops (Annuals) – 15 years from the date of registration of the variety.
 - For extant varieties – 15 years from the date of notification of that variety by the Central Government under section 5 of the Seeds Act, 1966.
- Exemptions provided By the Act are covered under Farmers exemption and researchers exemption.
- UPOV was established by the International Convention for the Protection of New Varieties of Plants. The Convention was adopted in Paris in 1961 and it was revised in 1972, 1978 and 1991. UPOV's mission is to provide and promote an effective system of plant variety protection, with the aim of encouraging the development of new varieties of plants, for the benefit of society.

GLOSSARY

Protection of plant varieties - The protection on the plant variety means no one can sell, export, import or produce the seed or propagating materials of such protected (registered) plant variety without the registered breeder's (owner's) permission.

Seed - It means a type of living embryo or propagule capable of regeneration and giving rise to a plant which is true to such type.

Essential characteristics - It means such heritable traits of a plant variety which are determined by the expression of one or more genes of other heritable determinants that contribute to the principle features, performance or value of the plant variety.

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 combination of letters and figures written in any language.

Distinct - A variety is said to be distinct if it is clearly distinguishable by at least one essential characteristic from any other variety whose existence is a matter of common knowledge in any country at the time of filing an application.

Extant variety - It is any variety which is in public domain or about which there is a common knowledge.

Farmers' Variety - Farmers variety means a variety which has been traditionally cultivated and evolved by the farmers in their fields.

TEST YOURSELF

(These are meant for recapitulation only. Answers to these questions are not to be submitted for evaluation).

1. Write short note on constitution of Protection of Plant Varieties and Farmers' Rights Authority.
2. Define the term 'farmer' and 'farmers variety' as defined under Plant Varieties Protection and Farmers' Rights Act, 2001 (PVPFR).
3. Explain the functions of Protection of Plant Varieties and Farmers' Rights Authority.
4. Write a note 'National Register of Plant Varieties' kept under Plant Varieties Protection and Farmers' Rights Act, 2001 (PVPFR).
5. Mention the provisions related to 'Plant Varieties Protection Appellate Tribunal'.
6. Write a Note on Farmers Rights as per provisions of Plant Varieties Protection and Farmers' Rights Act, 2001 (PVPFR).

7. Mention the situations under which the certificate can be Surrendered under the provisions of Plant Varieties Protection and Farmers' Rights Act, 2001 (PVPFR).
8. Mention the grounds on which the certificate can be revoked under the provisions of Plant Varieties Protection and Farmers' Rights Act, 2001 (PVPFR).
9. Explain the protection plant varieties enjoy globally.
10. Explain the provisions pertaining to infringement under Plant Varieties Protection and Farmers' Rights Act, 2001 (PVPFR) with the help of relevant case laws.

LIST OF FURTHER READINGS

- The Protection of Plant Varieties and Farmers' Rights Act, 2001 and rules made therein as amended.
- PPVFR Act 2001, FAQ's, Edition 2021.
- Introduction To Plant Variety Protection Under The UPOV Convention - WIPO

OTHER REFERENCES (Including Websites / Video Links)

- <https://plantauthority.gov.in/>
- https://www.wipo.int/edocs/mdocs/sme/en/wipo_ip_bis_ge_03/wipo_ip_bis_ge_03_11-main1.pdf
- <https://www.wipo.int/ip-outreach/en/ipday/2022/toptips/upov.html>
- <https://plantauthority.gov.in/general-guidelines-regarding-registration-edv>
- <https://plantauthority.gov.in/sites/default/files/finalnewfaq23.02.2021.pdf>
- https://www.wto.org/english/tratop_e/trips_e/art27_3b_background_e.htm
- https://www.wipo.int/wipo_magazine/en/2019/01/article_0007.html
- https://www.wipo.int/wipo_magazine/en/2006/04/article_0004.html

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