

Protection of plant varieties & Farmers rights

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**Differing
concepts of
resources
and
ownership**

**Plant –
cultivated, wild
or managed**

**Botanical
variety**

Genome

**Knowledge about
use and
management**



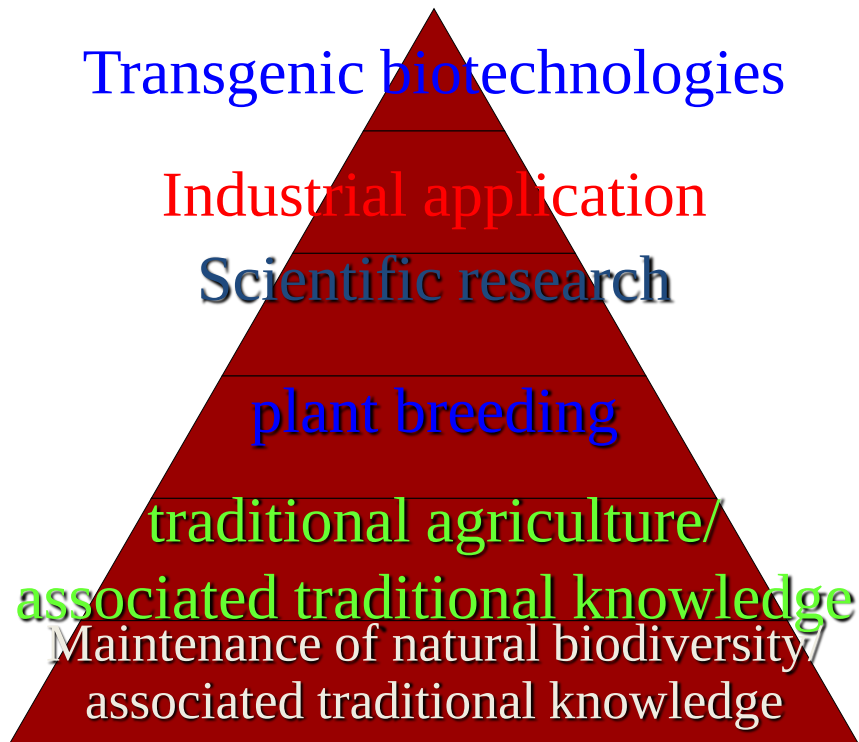
**Real & moveable
property, access
control, resource
sovereignty (visa,
permit)**

Variety right

Patent right

**Knowledge and
cultural rights**

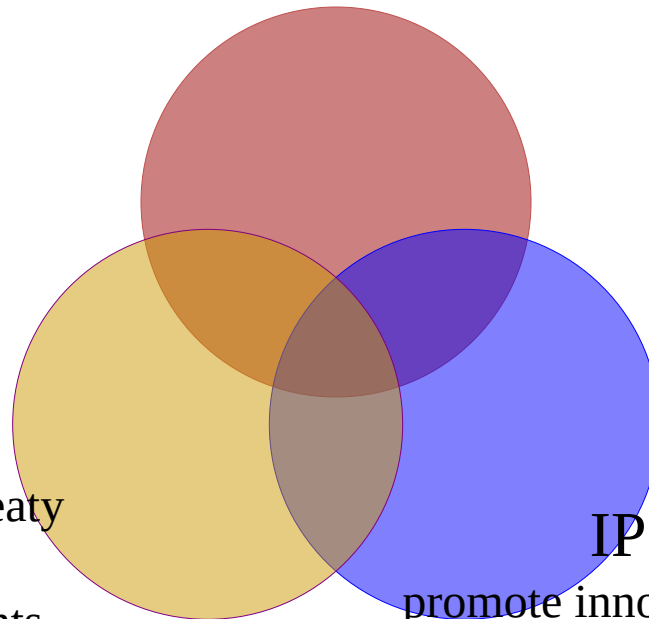
The Pyramid of stake holders



Overlapping international mechanisms

Convention on Biological Diversity:
In situ conservation

FAO – International Treaty
access to and use of
exotic agricultural plants
in germplasm collections



IP system and TRIPS
promote innovation, development of innovation
transfer and dissemination of technology

SUI GENERIS -

- Sui Generis Option is of significance to the developing countries to retain the rights of the farmers as well as the indigenous races or land races.
- This option also opens the strategy for benefit sharing and issues of prior informed consent and issues of Traditional Knowledge.
- Landraces may be excluded from IP protection by the requirement that a new variety is distinct from "varieties of common knowledge".

Protection of Plant Varieties and Farmers Rights Act of 2001

- **The variety should be novel, distinctive, uniform and stable**

NOVELTY

- Plant variety is 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 breeder or his successor for the purpose of exploitation of such variety-

NOVELTY

- (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:

NOVELTY

- Provided that a trial of a new variety which has not been sold 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, 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.

DISTINCTIVENESS

- New plant variety will be considered 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 of the application.

UNIFORM

- New plant variety will pass uniformity test, if subject to the variation that may be expected from the particular features of its propagation, it is sufficiently uniform in its essential characteristics.

STABILITY

- New plant variety will be considered 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.

PPVFR ACT 2001

- ◆ **The Act provides for registration of a new variety, which does propagation.**
- ◆ **not contain any gene or any gene consequences involving terminator technology.**

What cannot be registered

- A plant variety which is :-
- (i) 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, identify of such variety, or the identity of breeder of such variety;
- (iv) is likely to deceive the public or cause confusion in the public regarding the identity of such variety;

What cannot be registered

- (v) is comprised of any matter likely to hurt the religious sentiments respectively of any class or section of the citizens of India;
- (vi) is prohibited for use as a name or emblem for any of the purposes; (vii) is comprised of solely or partly of geographical name.

PROTECTION OF PLANT VARIETIES AND FARMERS' ACT 2001.

- **New variety can be registered with a denomination.**
- **Criteria for registration of denomination is similar to trademark registration.**
- **Each applicant should make available with application such quantity of seeds of variety for purpose of conducting tests.**
- **On acceptance of an application it would be advertised.**
- **Is subject to opposition by any person within a period of three months from date of advertisement.**

PROTECTION OF PLANT VARIETIES AND FARMERS' ACT 2001.

- Registration is valid for 9 years in case of trees and vines.
- For a period of 6 years in case of other crops.
- Maximum protection granted in case of trees and vines is 18 years.
- In case of extant varieties 15 years.
- In other cases 15 years.

Rights

Registration grants exclusive rights on the breeder or his successor or his agent or licensee to

- Produce
- Sell
- Market
- Distribute
- Import or export
- Variety.

- The Act provides for a Register called National Register of Plant Varieties at the head office of the Plant Varieties Registry wherein shall be entered:-
- The names of all the registered plant varieties with names and addresses of their respective breeders;
- The right of such breeders in respect of the registered variety;
- 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.

Applicant

- Breeder of the variety
- Any successor of the breeder of the variety
- Assignee of the breeder of the variety
- Farmer or group of farmers or community of farmers claiming to be breeder of the variety.
- Any University or funded Agricultural Institution claiming to be breeder of the variety.

Farmer

- . cultivates crops by cultivating the land himself; or
- . cultivates crops by directly supervising the cultivation of land through any other person; or
- . 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;

Farmers' Rights

- Farmer who has bred or developed a new variety is entitled to registration and protection like a breeder.
- Farmer shall be entitled to save, use, sow, resow, 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 the Act.

Rights of Communities

- Any person, group of persons or any Governmental or non-governmental organization may on behalf of any village or local community in India file application for protection of any claim attributable to the contribution of the people of that village or local community in the evolution of any variety.
- Farmer or Group of farmers or village or community shall not be liable to pay any fee.

Disclosure

- Breeder or any other person applying for registration shall disclose in the application information regarding use of genetic material conserved by any Tribal or rural families in the breeding or development of such variety.
- Non-disclosure of such information would lead to rejection of the application.

Gene fund

- National Gene Fund shall be constituted by the Central Govt. for meeting.
- Any amount paid by way of benefit sharing.
- The compensation payable.
- The expenditure for supporting the conservation and sustainable use of genetic resources including in situ and ex situ collections.
- The expenditure of the scheme relating to benefit sharing.

Compulsory License

- Compulsory license to undertake production, distribution and sale of the seed or other propagating material of the variety can be filed to the authority after expiry of 3 years from date of issue of certificate of registration on the ground that
- Reasonable requirements of the public for seeds or other propagating material of the variety have not been satisfied.
- The seed or other propagating material of the variety is not available to the public at reasonable price.

Registration process

- The applicant should:
 - [L
SEP]1. Assign a single and distinct denomination of the new variety from the existing ones;
 - [L
SEP]2. By affidavit swear that such variety does not contain any gene sequencing to employ Terminator Technology;
 - [L
SEP]3. Contain complete passport data of the parental lines from which the new variety had been derived;
- [L
SEP][L
SEP]

Registration process

4.State the geographical location in India from where the genetic material has been taken and also indicate, whether any farmer community or institution involved in breeding, evolving or developing the parental life;

5. Contain statement about its novelty, distinctiveness, uniformity and stability;

[L
SEP]6.A declaration that the genetic material used for

Registration Process

7. Be accompanied with the prescribed fees; [SEP]

8. Provide sample seeds with the application to enable the Registrar to conduct tests and the applicant should bear the costs of such testing.

9. The applicant must deposit the seeds or propagative material including parental line seeds of the registered variety in the National Gene Bank. The Depository Organization at the Union territory of Chandigarh.

Registration Process

11. After the acceptance of the application, the Registrar will advertise in the gazette, the specifications of the new variety including photographs and drawings and call for objection against the Registration.
12. Any person within three months from the date of advertisement may lodge the opposition along with the prescribed fee.
13. The Registrar thereafter will forward the notice of opposition to the applicant who must lodge the counter statement within two months, failing with which the application will be deemed to have been abandoned.
14. After the lodging of the counter statement by the applicant, the parties will be given chance to submit evidence in support of the respective cases and thereafter the matter will be decided in a quasi-judicial manner.

The Chapters of the Act

- **CHAPTER I** Preliminary (Clauses 1-2)

CHAPTER II PPVFR Authority and Registry
(Clauses 3-13)

CHAPTER III Registration of PV And EDV
(Clauses 14-23)

CHAPTER IV Duration And Effect Of
Registration And Benefit Sharing (Clauses 24-
32)

Chapters of the Act

CHAPTER-V **Surrender & Revocation of Certificate & Rectification & Correction of Register (Clauses 33-38)**

CHAPTER-VI **Farmer's Rights (Clauses 39-46)**

CHAPTER-VII **Compulsory Licence (Clauses 47-53)**

CHAPTER-VIII **Plant Varieties Protection Appellate Tribunal (Clauses 54-59)**

Chapters of the Act

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CHAPTER-IX Finance, Accounts and Audit
(Clauses 60-63)

CHAPTER-X Infringement, Offences,
Penalties & Procedure (Clauses 64-77)

CHAPTER-XI Miscellaneous (Clauses 78-97)

Variety means a plant grouping except microorganisms within a single taxon of the lowest known rank, which can be

- defined by the expression of the characteristics resulting from a given genotype of that plant grouping
- distinguished from any other plant grouping by expression of at least one of the said characteristics and
- 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

Extant variety

means a variety available in India which is

- notified under *Section 5* of the *Seeds Act, 1966*, or
- farmers' variety, or
- a variety about which there is a common knowledge, or
- any other variety which is in public domain

Farmers' variety means a variety which

- has been traditionally cultivated and evolved by the farmers in their fields, or
- is a wild relative or land race of variety about which the farmers possess the common knowledge

Essentially derived variety in respect of a variety (the initial variety) shall be said to be essentially derived from such initial variety when it

- is predominantly derived from such initial 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,
- is clearly distinguished from such initial variety, and
- 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 genotypes or combination of genotypes of such initial variety

CHAPTER III: Registration of PV And EDV (Clauses 14-23)

Clause 15 Registerable varieties

15 (1). A new variety shall be registered under this act if it conforms to the criteria of novelty, distinctiveness, uniformity and stability.

15 (2) 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 distinctive- ness, uniformity and stability *as shall be specified under the regulations.*

15 (3) For the purposes of the sub sections (1) and (2) as the case may be , a new variety shall be deem 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 of the application.
- 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;***

15 (4) A new variety ***shall not be registered*** under this Act if the denomination given to such variety -

(viii) is comprised of solely or partly of geographical name: Provided that the Registrar may register a variety, the denomination of which comprised 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.

18 (1) Every application for registration under ***Section 14*** shall -

- (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 organisation in breeding, evolving or developing the variety;
- (g) be accompanied by ***such fees as may be prescribed;***

Clause 19 Test to be conducted

19 (1) Every applicant shall, along with the application for registration made under this Act, make available to the Registrar *such quantity of seeds* of a variety for registration of which such application is made, for the purpose of conducting tests to evaluate whether seeds of such variety along *with parental material* conform to the standards as may be specified by regulations

Clause 21 Advertisement of application

21(3) Opposition to the registration under sub section (2) may be made on any of the following grounds, namely: -

(d) that the variety may have adverse ***effect on the environment***

CHAPTER IV: Duration And Effect Of Registration And Benefit Sharing (Clauses 24-32)

24(2) 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 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:*

24(6) The certificate of registration issued under this section or sub-section (8) of the **Section 23** shall be valid for **nine years** in 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 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 case of **trees and vines, eighteen years** from the date of registration of variety,

(ii) in the case of **extant varieties, fifteen years** from the date of **notification** of the variety by the Central Government under **Section 5** of the **Seed Act, 1966**, and

(iii) in the other cases, **fifteen years** from the date of registration of the variety

Clause 27 Breeder to deposit seeds or propagating material

27(1) The breeder shall be required to deposit such quantity of seeds or propagating material including parental line seeds of registered variety in the National Genebank as may be specified in the regulations for *reproduction purpose at breeder's expense* within such time as may be specified in that order.

27(2) The seeds or propagating material or parental line seeds to be deposited under sub-section (1) shall be deposited to the National Gene Bank specified by the Authority.

Clause 29 Exclusion of certain varieties

29(1) 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.

29(2) 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 farmer's varieties under this Act*.

29 (3) 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.***

Clause 30 Researchers' Right

30 Nothing contained in this Act shall prevent-

(2) The use of the variety by any person as an initial source of variety for the purpose of creating other varieties:

Provided that the ***authorisation 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.***

CHAPTER-V: Surrender & Revocation of Certificate & Rectification & Correction of Register (Clauses 33-38)

Clause 35 Payment of annual fee and forfeiture of registration in default thereof

35(1) 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.

CHAPTER-VI: Farmers' Rights (Clauses 39-46)

Clause 39 Farmers' Right

39(2) 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 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 shall 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, it 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.*

Clause 40 Certain information to be given in application for registration

40(1) 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 by any tribal or rural families in the breeding or development of such varieties.***

Clause 42 Protection of innocent infringement

42(I) 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.

Case law discussion

- **Mr.S.Sartaj Mohammed Khan. vs Protection Of Plant Variety & ...**
- **WA NOS.651 OF 2010, 537 OF 2011 & 539 OF 2011 AND WP NO.27663 OF 2010**
- **Bowman v. Monsanto**
- **Monsanto VS Schmeiser**

A LAST WORD

- THANK YOU FOR YOUR TIME
- Looking forward your questions or comments or observations

- ..2..
- B) Distinctiveness –C) Uniformity – New plant variety will pass uniformity test, 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)