

# PROTECTION OF PLANT VARIETIES AND FARMERS' RIGHTS ACT, 2001:



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# Scope

- **Why IP for plant related inventions**
- **Different forms of IP**
- **Patents**
- **PPVFRA**



# Why Protection for plants is required in India?

- ❑ Compliance with TRIPS
- ❑ Some form of IPR protection is necessary for plants
  - ❑ Can be in the form of patent protection; or
  - ❑ By a *sui generis* system; or
  - ❑ By a combination of both



# Forms of Intellectual Property

## IP –Plant related inventions

- Patents
- Plant Variety Protection (PPV&FRA)
- Trademarks
- Trade secrets
- Copyrights



# Indian Patent Act

## Present Position – Post 2005 Amendments

### *All products and processes patentable including*

- Medicines for internal / external use of humans or animals
- Substances used in diagnosis
- Intermediate chemical substances used in the preparation or manufacture of medicine or drug
- Fertilizers, insecticides, pesticides, fungicides, weedicides



# Important Changes

- ⇒ Patents granted for product patent
  - ▶ Food products & Pharmaceuticals
  - ▶ Chemicals
  - ▶ Alloys, semi-conductors, inter-metallic compounds
- ⇒ Pre-grant opposition
- ⇒ Uniform patent term of 20 years
- ⇒ Formation of IP Appellate Board



# Exclusions

- **Following are not inventions:**
- Frivolous or contrary to natural laws
- Contrary to public order, morality, harmful to humans, animals, plants and environment
- Mere discovery of a scientific principle
- Formulation of an abstract theory
- Discovery of living things or non living substances in nature.
- Method of horticulture/agriculture



# Exclusions

- ➔ Medicinal, surgical, curative, prophylactic, diagnostic, therapeutic treatment of animals and humans not patentable
- ➔ Treatment of plants patentable
- ➔ Diagnostic apparatus - patentable



# Living Organisms

- **Micro organisms - patentable**
  - Isolated
  - Mutated
  - Adapted
  - Recombinant
- **Mandatory deposition of the micro organism in an IDA**
- **Source and geographical origin to be disclosed**



# Plant inventions

- ➔ **Grey Area - between Essentially Biological Processes and non-biological processes**
- ➔ **Processes exist where biological reproduction is employed**
- ➔ **Steps consisting of direct human intervention could warrant patentability**



# PPV&FRA



# Crops Covered under the PPVFRA

## FIRST PHASE

- ❑ Cereals : Rice, wheat, maize, sorghum, pearl millet
- ❑ Legumes: Chickpea, mungbean, urdbean, field pea, rajmash, lentil, pigeon pea

## SECOND PHASE

- ❑ Oilseeds : Rapeseeds mustard, groundnut, soybean, sunflower, safflower, castor, sesame, linseed
- ❑ Fibre Crop : Cotton and jute
- ❑ Sugarcane
- ❑ Fodder Varieties : Lucerne, berseem
- ❑ Vegetables : Tomato, brinjal, okra, cauliflower, cabbage, potato, onion, garlic
- ❑ Flowers : Rose and Chrysanthemum



# Type Of Varieties Registrable

**ESSENTIALLY  
DERIVED VARIETY**

**RETENTION OF ESSENTIAL  
CHARACTERISTICS OF  
GENOTYPE**

**FARMERS'  
VARIETY**

**CULTIVATED BY FARMER OR HAVING  
KNOWLEDGE OF WILD RELATIVE OR  
LAND RACE**

**PROPAGATING  
MATERIAL**

**PLANT, COMPONENTS & SEED**

**EXTANT VARIETY**

**SEEDS ACT, FARMERS VARIETY  
COMMON KNOWLEDGE VARIETY**



## Definitions –Sec. 2g

- **‘denomination’**, in relation to a variety or its propagating material or EDV or its propagating material means the denomination of such variety- expressed by means of letters or a combination of letters and figures written in any language;



# Registration Of New Variety- CRITERIA

- **NOVEL**                      **VARIETY IS NEW**
- **DISTINCT**                      **ATLEAST ONE ESSENTIAL CHARACTERISTIC**
- **UNIFORM**                      **SUFFICIENTLY UNIFORM**
- **STABLE**                      **SUSCEPTIBLE TO CHANGE AFTER REPEATED PROPAGATION**



# PLANT VARIETIES ELIGIBLE FOR REGISTRATION

GENRE OR SPECIES  
NOTIFIED BY THE  
GOVT

AN EXTANT VARIETY

A FARMERS VARIETY

NOVEL

DISTINCT

UNIFORM

STABLE



## **Registered Varieties**

- **Issue of certificate of registration-Sec. 24**
- **Publication of list of Varieties- Sec. 25**
- **Determination of benefit sharing by Authority -Sec. 26**
- **Breeder to deposit seeds or propagating material- Sec.27**
- **Registration to confer exclusive right to the breeder or his successor-Sec. 28**



# NOVELTY OF VARIETY IS PROTECTED-Sec. 15(3) a

## 1. EXPLOITATION BY SALE OR DISPOSAL



IN INDIA

< 1 YEAR

OVERSEAS

FOR TREES & VINES < 6 YRS  
OTHERS < 4 YRS

## 2. USED FOR TRIAL NOT NOVELTY DESTROYING



# PVP Conditions

- *Denomination-15(4), 17*
- *Form -18*
- *Descriptors of variety*
- *Novelty*
- *DUS*
- *Parental lines*
- *Terminator technology*
- *Test to be conducted -19*



# Who is a Farmer ?

A farmer is defined in the PPVFRA as :

## **Section 2(k) "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*



# Farmers' Rights (Sec 39)

- Has the same privilege with respect to a breeder of a variety
- A farmers' variety shall be entitled for registration if a declaration has been made that the initial variety has been lawfully obtained
- Can save, use, sow, resow, exchange, share or sell his farm produce including seed of a protected variety
- The farmer as such cannot sell branded seeds of a protected variety
- A farmer can claim damages if the seed of the protected variety does not give the yield as stated by the breeder.



# A Compulsory Licensing System

## *Section 47*

- If seeds of a protected variety are not available after 3 yrs of registration
- in adequate quantity, and
- at reasonable price,
- the Authority may grant license to a third party to (a) undertake production, and
- (b) distribution and sale of the seed on reasonable royalty



# Benefit Sharing- National Gene Fund

- Authority will invite claims for benefit sharing from persons or organizations
- Benefit sharing only for Indian Citizens and Organizations
- Breeder can oppose the claims
- Authority shall decide the quantum
- The amount of benefit sharing shall be deposited with the National Gene Fund



THANK YOU!

