

# **“Plant Breeders’ View on Protection of Intellectual Property (IP) and Comparison of IP Protection in the Seed Sector between India and Germany”**

**Date: Wednesday, 3<sup>rd</sup> February 2021 (03:00 pm- 04:30 pm)**

## **Minutes of the meeting**

An International webinar on the theme, “**Protection of Intellectual Property (IP) and Comparison of IP Protection in the Seed Sector between India and Germany**” was organized by DST-CPR Panjab University, Chandigarh on 3<sup>rd</sup> February 2021 with an aim to sensitize the researchers and policy makers to understand the significance of Plant variety protection (PVP) and Intellectual Property Rights (IPR) in agriculture R&D. The opening remarks of the webinar were given by Dr. Mansimran Khokar (Sr. Scientist D, DST-CPR, Panjab University, Chandigarh). She highlighted the need behind protecting various plant varieties and requirement of Indo-German cooperation seed project. The keynote speakers were **Ms. Kirsten Schlemmer, Department of Ornamental Plants, Federal Association of German Plant Breeders, Bonn, Germany, and Mr. Dieter Rucker, Manager International Relations, Federal Association of German Plant Breeders, Bonn, Germany**

Prof. C. Nirmala (Coordinator, DST-CPR, Panjab University, Chandigarh) welcomed all the dignitaries, speakers and participants for joining in this international webinar and sharing their view on PVP and IPR related to agriculture research and development (R&D). She mentioned that there is an imperative need of an hour to understand the role of private investment in agriculture (as in Germany) and how we can inculcate the suggestive measures into the Indian agriculture scenario.

Dr. Mansimran gave a brief introduction of the speakers Ms. Kerstin Schlemmer & Mr. Dieter Rucker and highlighted their key roles in plant breeders and seed trading companies. Ms. Kerstin Schlemmer is an active promoter of innovation of plant varieties through IPR. She is the head of department of ornamental plants. She also looks into the breeding of plant varieties and trade of their cutting. Her work also involves fostering and safeguarding economic rights by consultations and providing a framework for plant breeding organizations. They have a 130-

member team in the organization in which she provides consultations related to plant breeding and seed trading. Mr. Dieter Rucker has been working for the Federal Association of German Plant Breeders in Bonn for 30 years, where his responsibilities include international affairs. In this capacity, he is a member of numerous technical committees of the European umbrella organization Euroseeds and the International Seed Federation, which represents the seed industry worldwide. Mr. Dieter Rucker has experience in international seed projects in Ukraine, the Russian Federation, Mongolia, China, India, Turkey and Ethiopia.

Followed by the introduction, Ms. Kerstin Schlemmer initiated her talk. She told about the German Plant Breeder's Associations (BDP), which is working on diversity of private plant breeding stations in close association with International Seed Federations. BDP has 130 members constituting plant breeders and seed traders, 57 of whom are conducting their own breeding programs. She mentioned that approximately 115 species are being worked upon as German breeding programs and there are more than 3500 registered plant varieties in Germany. More than 15 % R&D of these seed breeds is conducted, which is a good number.

BDP mission is:

- (i) The effective protection of intellectual property.
- (ii) The organization of plant breeding research and variety development.
- (iii) The promotion of new breeding technologies.
- (iv) The improvement of legislation on plant variety protection and seed marketing

To achieve these missions, collaborations have been done with various Government agencies in Germany.

Mr. Dieter Rucker, highlighted the Indo-German Cooperation Seed Project, which started in July, 2013 and will continue till June, 2022 in which the Ministry of Agriculture and Farmers Welfare, Department of Agriculture, Cooperation and Farmers, India joined hands with German Federal Ministry of Food and Agriculture, Germany

Objectives of this project are:

Organization of expert consultations on

- (i) PVP

- (ii) Conservation of access to Plant Genetic Resources.
- (iii) Production of quality seeds (Seed certification)

Under this project Indian experts visit Germany and German experts visit India to learn about the facilities and work mechanism of both the countries. The speaker said they have partners in New Delhi for protection of plant varieties and farmer's rights authority, National Bureau for Plant Genetic Resources and National Seed Association of India. The discussions and studies made in Delhi are communicated to other states of India which help other states establish projects and run them successfully, the first project was run in Telangana:

- (i) Telangana State Seed + Organic certification authority.
- (ii) Telangana State Seeds Development Corporation limited
- (iii) Seedsman Association, Hyderabad

Plant breeder's view on Protection of IP is that a single state cannot fulfil its seed demand without collaborating with International seed sectors thus is it important to protect intellectual property to gain maximum advantages.

The example of development of import varieties, how the wheat yielded in France from 1815-2005 was also discussed. This development is because of import varieties in this context the significance of plant varieties was also explained. In principle, there are two options to finance plant breeding and variety development.

- (i) State breeding institutes (example socialist systems), which involves government funding.
- (ii) Private companies (e.g. market economy systems) which involves royalties and license fees.

In Germany, 100 % private companies develop plant varieties for farmers. Only a few state institutes work in this regime. Options for protecting IP of seeds and propagating material:

- (i) PVP according to UPOV
- (ii) Patent protection
- (iii) Trademark protection

The speaker told the UPOV status of 31<sup>st</sup> January, 2018 and highlighted the significance of more countries collaboration for enhancing agriculture produce.

Pre-conditions for PVP are:

In order to be granted PVP, a variety should be distinct, uniform, stable and new and it should pass the DUS test performed by the National Plant variety office.

Exclusive rights of the holder of PVP:

- (i) Propagation of the protected variety.
- (ii) Processing for propagation.
- (iii) Marketing
- (iv) Import/Export
- (v) Storage of propagation material for one of the purposes mentioned above.

**Exceptions to the Breeder's right (1991 Act) constituting both compulsory and optional exceptions:**

**(i) Compulsory Exceptions**

- (a) Acts done for private and non-commercial purposes.
- (b) For experimental purposes.
- (c) To allow breeding other varieties: It means that all the breeders work with the best material available to them. However, it is different from a patent, where varieties can be utilized only after seeking permission from the patentee.

He mentioned that both PVP and patent protection (PP) are necessary so that the companies can invest in Science & Technology and Trade Secret. However, we need to be careful with PP due to legal issues in it.

**(ii) Optional Exceptions**

- (a) Farm-Saved Seeds: Farmers can buy the seeds from a protected variety and use the harvest material to grow new crops in the following era.

The country may allow International Plant Protection legislation and farmers to produce their own seed under protected varieties under certain conditions.

**Acts NOT considered to be infringement by a researcher**

- (i) Use of variety for research and experimental purposes.

- (ii) Use of variety as an initial variety for the creation (BUT not for sale/commercialization) of a new variety.

### **Acts considered to be infringement by a researcher**

Repeated use of the protected variety for commercial production of a new variety without the authorization of the holder of breeder's right.

### **Seed price is the sum of different components inculcating the following:**

- (i) Production cost of seed is 40 %
- (ii) Seed cleaning and processing is 10 %
- (iii) Analysis and quality control is 5%
- (iv) Logistics, etc. is 20 %
- (v) Royalty of 15 % is given to the initial seed breeder.

Mr. Dieter Rucker compared the PVP in India and Germany from the breeder company's point of view:

#### **Similarities of PVP in India and Germany**

- (i) DUS testing and granting of PVP works according to the same principles for both the countries: Indian experts look more for plants in the field, but their DUS testing mechanism is the same.
- (ii) PVP is the main source of IP protection for seeds and propagating material.
- (iii) Seed industries are very much in favor of PVP.

#### **Differences of PVP in India and Germany**

- (i) Indian law on PVP was passed in 2001, whereas German law on PVP was passed in 1953. This implies India is new and developing in this field, unlike Germany which has done significant development in this domain.
- (ii) Structure of the seed industries: In India, there is dominance of government institutes in seed and plant breeding sectors, whereas in Germany, private is a more active participant in this field.

(iii) In India, government institutes and cooperatives focus on large volume, low value crops and private companies on low volume, large value crops.

(v) In Germany, almost 100 % of the plant breeding and variety development has been done by the private companies. Hybridization is a sort of protection system to add value to the crops. Due to this lacking mechanism in India, private investments are less, because of the insecurity about their protection of rights.

### **Registered Varieties**

(i) New variety

(ii) Extant variety (Means conditional varieties but not new, which farmers are using and sharing with their neighbors, which are protected under traditional varieties.

Mr. Dieter Rucker concluded his talk while sharing his experiences of Indo-German plant breeding and variety projects and emphasized a need to work amicably in this sector for its growth and development.

Ms. Sukriti Paliwal (Scientific Officer, DST-CPR) thanked the speaker and took the question/answer session and discussed the various queries of the participants with the speaker.

Prof. C. Nirmala gave her concluding remarks and emphasized the significant need of private investment in agriculture R&D in India. A consortium of stakeholder, policy makers and farmers need to be established to understand and work accordingly in this domain. She thanked the speaker for sharing his valuable ideas and highlighting the key features of PVP and IPR in plant breeding and trading mechanisms in India and Germany.