Current Situation of Enforcement of Plant Breeder's Right under the UPOV Convention

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Abstracts

Breeding new plant varieties are very important for the development of seed industry, and which initiate seed propagation, multiplication, seed processing, and seed marketing. Breeders are invest to develop new plant varieties in improving yield, quality, processing, etc. Thanks to efforts made by breeders, better varieties are available to farmers, nurserymen and consumers, which are greater resistance, a broader range and longer life of varieties. The establishment of plant breeders’ rights is only worthwhile if the enforcement of the right can also be properly regulated. UPOV provide and promote an effective system of plant variety protection (PVP), with the aim of encouraging the development of new varieties of plants, for the benefit of society. There are 65 countries introduced and implementing protection system for new varieties of plant under UPOV system as of 2007. Member countries of UPOV have their own enforcement system with several measures such as G–Man system in Japan, Variety Tracer in the Netherlands and Arbitration committee in Korea. These countries provide counseling, advice and techniques to the breeders using variety identification by morphology, molecular techniques and DNA profile. It is very important to set up an enforcement system for the safeguard of the breeder’s income.

Key words

Breeding, Plant variety protection (PVP), UPOV, Enforcement of PBR

Introduction

Farmers and growers use a more precisely defined group of plants, selected from within a species, called a plant variety.Breeder develops a new variety and definition of breeder in UPOV Convention is a person who bred, or discovered and developed a variety or the successor in title of the first or second aforementioned person. Breeding is defined as the art and science of changing plants genetically. The process of plant breeding is long and expensive; however, it can be very quick and easy to reproduce a variety. It is, therefore, important to provide 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 purpose of this study is to survey the enforcement system for plant breeder’s right (PBR) using by collected information and analysis of data collected by circulated questionnaire. This analysis of situation of each country would be useful for the establishment of enforcement system of PBR.

Methods

This study was carried out analysis information collected through symposium and seminar, surveyed documents published by UPOV and analysis of raw data collected by circulation of questionnaire to the UPOV member countries by MAFF of Japan in 2006. Seed Industry Law of Korea was analyzed to collect enforcement system for PBR.
Results

1. The Purpose of PVP and UPOV

a) Purpose and background of PVP

PVP system is introduced for the protection of new plant varieties which has novelty, distinctness, uniformity, stability and denomination. Protection is afforded to plant breeders as an incentive for the development of new varieties of plants, in order to provide sustainable progress in agriculture, horticulture and forestry. According to the article 27.3(b) of TRIPs agreement, 'members may exclude from patentability inventions, however, members shall provide for the protection of plant varieties either by patents or by an effective sui generis system or by any combination thereof. The provisions of this sub-paragraph shall be reviewed four years after the entry into force of the agreement establishing the WTO.' This means that all the member of WTO should introduce the protection system of plant varieties depend on the situation of each countries.

b) Member of UPOV

By becoming a member of UPOV, a State or an intergovernmental organization signals its intention to protect plant breeders on the basis of principles that have gained worldwide recognition and support. It offers its own plant breeders the possibility of obtaining protection in the territories of other members and provides an incentive to foreign breeders to invest in plant breeding and the release of new varieties on its own territory. It has the opportunity through membership of UPOV to share in and benefit from the combined experience of the members and to contribute to the worldwide promotion of plant breeding. The number of UPOV member countries is 65 as of end of 2007.

Table 1) Member of UPOV for the protection of new varieties of plants

<table>
<thead>
<tr>
<th>Convention</th>
<th>State/Organization (65)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1972 Act</td>
<td>Belgium (1)</td>
</tr>
<tr>
<td>1978 Act</td>
<td>Argentina, Bolivia, Brazil, Canada, Chile, China, Colombia, Uruguay, Switzerland, Trinidad and Tobago, South Africa, Slovenia, Portugal, New Zealand, Nicaragua, Norway, Panama, Paraguay, Mexico, Kenya, Italy, Ireland, France, Ecuador (24)</td>
</tr>
<tr>
<td>1991 Act</td>
<td>Albania, Austria, Austria, Uzbekistan, Belarus, Bulgaria, Croatia, Czech Republic, Denmark, Dominican Republic, Estonia, European Community, Finland, Germany, Hungary, Iceland, Israel, Japan, Jordan, Kyrgyzstan, Latvia, Lithuania, Moldova, Morocco, Netherlands, Poland, Republic of Korea, Romania, Russian Federation, Singapore, Slovenia, Spain, Sweden, Tunisia, Turkey, Ukraine, United Kingdom, United States of America, Ukraine (40)</td>
</tr>
</tbody>
</table>

2. Plant breeder's right

a) Scope of breeder’s right

The UPOV Convention sets out a minimum scope of protection and offers members the possibility of taking national or regional circumstances into account in their legislation. The UPOV Convention defines acts concerning propagating material in relation to which the holder's authorization is required. Exceptionally, but only where the holder has had no reasonable opportunity to exercise his right in relation to the propagating material, his authorization may be required in relation to any of the specified acts done with harvested material of the variety. Like all intellectual property rights, plant breeders' rights are granted for a limited period of time. It is also important to note that the authorization of the holder of
a plant breeder’s right is not required for the use of their variety for private and non-commercial purposes, for research purposes, nor for use in the breeding of further new varieties.

b) Enforcement of plant breeder's right under UPOV system
A general view for the enforcement of plant breeders' rights is primarily the responsibility of the breeders based upon the appropriate legal remedies provided by members of the Union as required by the UPOV Convention. In this regard, UPOV has a position to discuss activities of UPOV and possible future initiatives in relation to the enforcement of plant breeders' rights on the examination of laws of future members, raising awareness of the importance of enforcement through seminars, lectures, distance learning and guidance, coordination and cooperation.

3. Enforcement measures at national level
1) Measures respect with material
   a) Propagating material of the protected variety,
      i) Civil relief
      Civil relief in Canada, China, Estonia, Finland, Hungary, Israel, Japan, Korea, Poland and Sweden is available in civil court to stop the use of protected variety, compensation for the damage or lost interest, and the recovery of the damaged business reputation caused by unlawful usage of the variety. Ireland and USA is available to relief at the district court and federal district court respectively.
      ii) Criminal sanction
      China is available to sentence to 7 years imprisonment or life imprisonment and punish him with a fine from 50% to two times the unlawful earnings or confiscation of the property in case of individual counterfeiting action. A fine for a business firm and punish the employee who should take the responsibility in the business firm with the same criminal sanction above in case of firm's counterfeiting action. Japan is available to sentence imprisonment with labor not exceeding 3 years and/or a fine not exceeding 3 million yen for a person. A fine is not exceeding 100 million yen for a juridical person. Korea is available to sentence imprisonment with labor not exceeding 5 years and/or a fine not exceeding 30 million won for a person.

b) Harvested materials of the protected variety
   i) Civil relief
   Civil court in Finland, Japan and Korea is capable to order followings to the defendant: injunction for the use of protected variety, compensation for the damage. U.S.A has same measure as that of propagating material.
   ii) Criminal sanction
   In Ireland, sanction may include a fine not exceeding € 635, or imprisonment for a term not exceeding 3 months, or both such fine and imprisonment. (Currently under revision.). In Japan, imprisonment with labor is not exceeding 3 years and/or a fine not exceeding 3 million yen for a person. A fine is not exceeding 100 million yen for a juridical person. In Korea, imprisonment with labor is not exceeding 5 years and/or a fine not exceeding 30 million won for a person.
Table 1) Measures for the enforcement of PBR in national law on propagating material

<table>
<thead>
<tr>
<th>Country</th>
<th>UPOV Act</th>
<th>Propagating material</th>
<th>Harvested material</th>
<th>Processed material</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Criminal sanction</td>
<td>Criminal sanction</td>
<td>Criminal sanction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Civil relief</td>
<td>Civil relief</td>
<td>Civil relief</td>
</tr>
<tr>
<td>Canada</td>
<td>1978</td>
<td>No measures</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>1978</td>
<td>Civil court</td>
<td>7 years imprisonment</td>
<td>No</td>
</tr>
<tr>
<td>Estonia</td>
<td>1991</td>
<td>Civil court</td>
<td>Yes but not defined</td>
<td>Y</td>
</tr>
<tr>
<td>Finland</td>
<td>1991</td>
<td>Civil court</td>
<td>Fine or imprisonment of 6 months</td>
<td>Civil court</td>
</tr>
<tr>
<td>Hungary</td>
<td>1991</td>
<td>Civil court</td>
<td>No measures</td>
<td>Civil court</td>
</tr>
<tr>
<td>Ireland</td>
<td>1978</td>
<td>District court</td>
<td>not exceeding € 635 or not exceeding 6 months</td>
<td>District court</td>
</tr>
<tr>
<td>Israel</td>
<td>1991</td>
<td>Civil court</td>
<td>Imprisonment or fine</td>
<td>Civil court</td>
</tr>
<tr>
<td>Japan</td>
<td>1991</td>
<td>Civil court</td>
<td>not exceeding 5 years or not exceeding 30 million won</td>
<td>Civil court</td>
</tr>
<tr>
<td>Korea</td>
<td>1991</td>
<td>Civil court</td>
<td>not exceeding 5 years or not exceeding 30 million won</td>
<td>Civil court</td>
</tr>
<tr>
<td>Lithuania</td>
<td>1991</td>
<td></td>
<td>000 to 2000 litas</td>
<td>No</td>
</tr>
<tr>
<td>Poland</td>
<td>1978</td>
<td>Civil court</td>
<td>up to 1 year</td>
<td>Civil court</td>
</tr>
<tr>
<td>Sweden</td>
<td>1991</td>
<td>Civil court</td>
<td>Fine and not exceeding 2 years</td>
<td>Civil court</td>
</tr>
<tr>
<td>U.S.A</td>
<td>1991</td>
<td>Federal district court</td>
<td>No measures</td>
<td>Federal district court</td>
</tr>
</tbody>
</table>

(c) Processed materials of the protected variety

Korea, Japan, Poland, Hungary and USA has same regulation as that of the harvested material in civil relief and measure in criminal sanction. Japan, imprisonment with labor not exceeding 3 years and/or a fine not exceeding 3 million yen for a person. A fine is not exceeding 100 million yen for a juridical person. But in Korea, imprisonment is longer and fine is lighter than Japan that of imprisonment with labor not exceeding 5 years and/or a fine not exceeding 30 million won for a person.

2) The surveillance and enforcement of breeder’s right

Organization of the surveillance in China is administrative department of agriculture and forestry for the propagating material of the protected variety by mediating the compensation of damage caused by the infringement and order the infringer to stop the infringing act, confiscate the unlawful earnings and punish the infringer with a fine five times more than the unlawful earnings. Source of finance will be heard from National or local budget. Plant Variety Development Office Ltd of Ireland is implementing surveillance for the seed and harvested products of protected varieties with information supplied on request, and by keeping records of seed sales with a finance beard percent of royalties received for certified seed of protected varieties. In Japan, National Center for Seeds and Seedlings is the surveillance organization for seed, harvested material and processed products of protected variety by direct observation, growing test, DNA analysis and making documents of infringement status and keeping seeds for evidence. Source of finance will be beard payment of prescribed fees. In Poland, Agencja Nasienna Ltd. is surveillance organization for seed material, harvested products, and processed products of protected variety by random sampling on the national market or on breeder’s request with finance beard at breeder’s
expense.

3) Support by the national office in the enforcement of the breeder's right

a) An alleged infringement of the right
Estonia, Finland, Hungary, Ireland, Israel, Japan, Korea, Lithuania, Poland and Sweden has support system by the national plant variety protection office to facilitate the enforcement of breeders' rights at national level in the case of an alleged infringement of the right. Hungary, Estonia, Lithuania, Poland provide a service of expert’s opinion on the identification of the product of the suspected variety. In case of U.S.A, no support by PVP office and the U.S. Department of Agriculture and the U.S. Patent and Trademark Office will remain neutral and will not take any position in specific cases involving the enforcement of breeders' rights.

4) Activities to increase public awareness of plant variety protection
Most of countries have their own public awareness system of plant variety protection with providing provision of information on the Web-site, publication and distribution of information, organizing national seminars, creation and maintenance of electronic databases containing national PVP data, to breeders, farmers, retailers and other related organizations.

5) Legal advice to the right holder

a) Institution or organization providing legal advice
The government of some countries provides the legal advice in China, Finland, Japan, Korea, Poland and USA concerning the enforcement of plant variety rights and legal aid in court or other legal matters for natural persons. USA provide toll free hotline monitored by attorneys at the Unites States Patent and Trademark Office in order to provide IP rights holders information about resources for the enforcement of their intellectual property by STOP Hotline.

4. Enforcement measures at the national border

1) Organization of implementing border measure
Border measures to prevent the unlawful import and export of the material of protected varieties in UPOV member countries are various however, most of countries has customs house with different names depending on the country. In case of U.S.A, several different institutions involved such as United States International Trade Commission, United States Department of Homeland Security, Bureau of Customs and Borders, United States Department of Homeland Security, Bureau of Quarantine and United States Department of Agriculture, Phytosanitary Inspection.

2) Coverage and National law of the border measures
The subjects of border measures are import and export of seed, harvested and processed products of varieties protected in the country. China, Estonia, Hungary, Japan, Lithuania and U.S.A have their customs law to ban the import and export of alleged variety of seed.

5. Support of investigation and analysis of alleged variety

1) Arbitration committee of Korea
The countries which have arbitration system for the breeder’s right are only Poland and Korea. Polish
Seed Trade Association implements arbitration on the seeds of protected varieties with fees from applicants. Arbitration committee in Korea will be established under the Seed Council of MAFF when a person who wants to have arbitration of dispute by infringement of plant breeder’s right to Seed Council. Seed council which received application compose the arbitration committee with 3 professional member, and arbitrate within 1 year after application. Seed Council can request cooperation to field test and DNA to the organization under the MAFF. Seed Council may ask attendance of the parties concerned, agent or interested parties to the arbitration committee or ask to submit the necessity material for the arbitration. In case of absence of parties concerned without legitimate reason, arbitration may deemed not to be arranged.

2) Variety Tracer of Netherlands

Naktuinbouw provide a service of Variety Tracer system which is combines the knowledge, independence and field trial facilities with the facilities provided by reputable DNA laboratories. The combination of elements allows evidence to be presented.

3) PVP G–man of Japan

The basic policy for measures against infringement is basically right holder’s responsibility. However, frequent infringement affects not only right holders but also farmers who depend on the protected varieties, and lot of rights holders has not enough information, experience and strong measures. Therefore Japanese government is implementing policies to improving the circumstances for the enforcement of PBR. Japanese government appointed 10 members as PVP G–man in 2006 which provide advice on counter measurement, preparation of report of infringement, deposit of plant material and identification test carrying out cultivation and DNA test to compare characteristics between two varieties.

Summary

To provide reasonable protection of the plant breeder’s right, UPOV convention provide key provisions such as scope, exception, exhaustion of PBR, provisional protection and variety denomination. UPOV member countries have their own enforcement system with civil relief, criminal relief for propagating, harvested and processed material of protected varieties at national level and border measure. Various information and advice for the breeder and farmers are published by government and agencies for the public awareness of PVP.

Reference


UPOV, 2007, OVERVIEW OF EXISTING ACTIVITIES OF UPOV AND POSSIBLE FUTURE INITIATIVES IN RELATION TO THE ENFORCEMENT OF PLANT BREEDERS’ RIGHTS. CC/73/2. UPOV