

FOOD SAFETY AND TRIPS RELATED PATENT FLEXIBILITY

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ABSTRACT

With the development of new varieties of the crops and new invention done by the corporation in the agriculture biotechnology, they often seek for the legal right over the Intellectual Property these innovations represent. But for the term of 'Agriculture', the protection of Intellectual Property in agriculture is always considered controversial because it opposes directly pre-existing system and rules of agriculture management that is basically based on free-exchange and on public sector involvement. So, sometimes issues occur that the genetically produced food is good for the health or not. And can it take into consideration environment safety or not. This paper discusses about implementation of Indian bio-diversity laws and to highlight the laws for the food safety and their implementation.

*"Health requires healthy food"*¹

Keywords: TRIPS Agreement, PVP, Food Safety, Biological diversity Act (2002),

INTRODUCTION

Food is need for life; it is a basic necessity for human beings to stay alive and survive in the toughest situations of the life. It is necessity to every man to consume healthy food, and stay healthy. It is a part of fundamental right under 'Right to Life'² secured by Constitution of India.

International community also has main objective to achieve the food security, but there are many things creating obstacles that a very less investment in agriculture field and rural-development sector, substantial increases in food prices and poverty. There are many factors related to control over plant materials and technologies and the production of the seeds which can also damage fulfilment of food security. This area is connected with the development and production of commercial crops is highly concerted. Research is increasing toward commercial attractive crops varieties; on the other hand traditional seed supply system is scoured. The rapidly spreading of commercial plant varieties has reduced the genetic variability and increased the vulnerability of agricultural production. But there are some types of the intellectual property rights that break the free flow of the information; i.e. through farmers' exchange of seeds.

Intellectual Property Rights were originally dealing with 'particular innovations' in manufacturing such as a new machinery, industrial products and the process of these things and such artistic works, creations such as musical work or literary work; but in recent times IPRs have been applied to other area such as biological processes and products which are including living organisms. So, the expansion of these IPRs on these areas has raised concerns about the possible implications for food security.³ These IP rights are exclusive in nature generally that means the holder of the right can exclude any one for a specific time period from using the protected subject-matter, unless or until the municipal law provides for specific exceptions or limitations on particular right. So that, IPRs remove the competition and provides the right to right holder to charge the price that the market could bear. Hence, IPRs affects access to protected products; so, higher price of agriculture product like seeds and other agriculture inputs will be harmful to small farmers or agriculturalists.

In addition, Intellectual Property Rights have an impact on agriculture research that is carried out and sustainability of agriculture:

1. Research towards commercial crops and varieties.
2. Research towards climate change and threats of pests and diseases.
3. Research in crops-diversity is losing due to uniformization resulting from the spread of commercial varieties.⁴

Although some factors⁵ such as patents-may amplify them. The use of the patent right in protection of innovations in plants is going to restrict on traditional knowledge, it affects the free flow of information, knowledge and materials under which agriculture has developed over the past centuries; such types of rights in this area may affect the rights of developing countries.

TRIPS Agreement discusses liberty with flexibilities to WTO members to implement the provisions of the TRIPS Agreement in such way that these provisions will be consisted with their agriculture and food policy objectives of the members; but in practical, these provisions which deal with the flexibility did not receive a good attention till now; most of WTO members countries till not used these flexibilities in their local laws and if some member countries adopted these flexibilities, they used only to limited extent.⁶ Countries must make new efforts to create a system that will protect Intellectual property, and such steps should be consistent with the provisions of the TRIPS Agreement, and will be adapted in their local conditions and encourage the researcher by rewarding something to them for the innovation to promoting food security with in the territory.

The Food Safety and Standard Act, 2006 was enacted by the Indian Parliament for the purpose to make available safe, pure and nutritious food for the public. This Act consolidates all the previous Acts of food safety and its rules came in force in 2011. This Act replaced many Acts which were implemented in the country like The Prevention of Food Adulteration Act, 1954; The Milk and Milk Products Order, 1992 etc.

INTELLECTUAL PROPERTY PROTECTION OF PLANTS

The right related to plant variety is not new in nature. In 1930, USA enacted an Act named 'The Plant Patents Act' to retort the stress of the emerging seed industry. It made to provide the protection of asexually reproduced cultivars⁷ under the special system of 'plant patents.' The Netherlands introduced in 1942 a new *sui generis* form of IPR for the plant varieties; after that it is known as PVP (plant variety protection); Germany followed such idea and made law in 1953.

PVP Model: The International Union for the Protection of New Varieties of Plants (UPOV) Convention signed in 1961, described the term PVP Model. Subsequently that convention is also revised two times in the years of 1978 and 1991. Firstly, the 1961, UPOV convention is restricting/banning the protections provided by the both PVP and the patent laws,⁸ but, in 1991, it is permitted to both when convention revised. The change done by PVP model reflects the emerging trends for granting patents on the plants and its components. In the modern situation the both protections PVP and Patent protection which cover plant DNA and Cells, but in many countries, in some of the cases these rights should be used for complete plants and its variety.

Some of the countries but number is very less, have implemented *sui-generis* regimes different from those of UPOV. Article 27.3(b) of TRIPS Agreement deals with such regimes. The FAO International Undertaking on Plant Genetic Resources for Food and Agriculture⁹ in 1983 first time mentioned about the notion of Farmers' Rights and later incorporated into the

ITPGRFA¹⁰ and in CBD (Convention on Biological Diversity) discussed about principle of benefit sharing¹¹; resolutely contributed to shaping those regimes.

Article 39 of the TRIPS agreement described the term ‘Trade Secrets’ which is applied on the innovations in the plant breeding, especially in the areas of the hybrid seeds. The rights provided under PVP protection and Patents are different; in case of PVP, there is also confusing whether it depends on UPOV 1978, UPOV 1991 or any other system applies.¹² It should be notified that PVP right which protects only those materials exists actually in some of the members’ countries, the authorities which are competent, they compel the researcher to provide the samples, and in some countries, these must be available till the protection is in force. And on the other hand, regarding patents, evidences only provided for the possibility of obtaining it, no need for the actual existence of subject matter. The rights which is described under Patents and PVP rights are the similar rights, but the PVP right contains some essential exceptions which are not recognised under patent laws in many countries like ‘Breeder’s exception’, the ‘Farmers’ privilege’, etc.

EXCLUSION FROM THE PATENTABILITY

“Food security may be negatively affected by the appropriation of plant genetic resources, as it may prevent further research and breeding or limit the possible sources of supply of seeds. Article 27.3 (b) allows WTO Members considerable policy space to define national laws in this area.” There are the areas where restrictions provided to get patent, these areas are:

1. for the plants
2. for that biological process which is essential, and
3. plant varieties.

Article 27.3(b) provides right to WTO Members that they can exclude plants from the patent protection; but in TRIPS Agreement, there is no such definition provided, so, that term ‘exclusion’ can be interpreted broadly; that’s means it is on the particular state who wants to opt these or not want to opt. but there is still question arising about prohibition of patents right on plants which includes also genes and plant cells, and other sub-cellular components.¹³ It may object that plant cells, genes, other related components are not the plant that means they are not under the exclusion of the TRIPS agreement; so, patent can be given for these components. But, in practice, these components also related to patents for plants.¹⁴ It is very essential for the food safety and security to differentiate the plants safety rights to the patent rights. The member countries must take some essential steps to excluding the plants from to providing patents on it though these inventions maybe genetically modified or not modified.

Article 27.3(b) of TRIPS Agreement also describes and allows the states to exclude essentially biological processes for the production of plants from patentability. That term came from European Patent Convention but it interpreted very narrowly. So, it must be the duty of the state to make rules for plant breeding methods that must be used without any restrictions for production of plants’ new varieties & safeguarding the diversity in this field.

There is another issue which is most controversial because TRIPS Agreement makes it controversial; the agreement deals with that the concept which is the protection in the field of plant varieties by numerous decisions: “patents, effective sui generis or a combination of both.” Some countries (mostly developed) proposed the rules to cover the plant and living organisms under the patentability but developing countries rejected that proposal or approach. European Union also in European Preventive Convention which clearly described that the

animal races and the plant varieties should be excluded from the patentability; this freedom is provided to members by the convention. "Countries should assess the different options; they have to provide protection for plant varieties in a manner that suits their national agriculture policy and food security objectives. Whether agricultural production in a particular country is essentially based on commercial or on farmers' varieties, protection of plant varieties under patents is not advisable, as they may restrict further breeding and farmers' saving and sharing of seeds."¹⁵

Food Security and Intellectual Property rights: Recent Developments in India

India has an interesting study on food security because it has adopted many policies on food security in the context of Intellectual Property Rights since independence. India has enacted patent law, which is generally inherited and not able to full fill the economic development goals of the country.¹⁶ So, in 1970, Indian Parliament enacted The Patents Act, 1970 which is based on the model of western model of Intellectual Property but has many exceptions when patent cannot be granted. The Act excluded the patent protection of life forms and precluded the patent right for the methods of agriculture and horticulture.¹⁷

The agriculture sector which excluded from patentability that developed a system of management in agriculture which based on the sharing of genetic material and related knowledge. But it did not provide the incentives for the development of private seed industry. Trade Related Aspect of Intellectual Property Rights (TRIPS), which imposed the introduction of PVP but it provides the option to member states to choose the particular form of protection in which they are comfortable (*sui generis* option). Indian Parliament enacted an Act namely 'The Protection of Plant Varieties and Farmers' Rights Act (Plant Variety Act)', in the year of 2001. This Act established both Farmers' rights and Plant Breeders' rights. This Act provides the right to farmers as the commercial breeders, to apply to have a variety registered. According to the provisions of the Act, the farmers will be treated as like commercial breeders and will get the same kind of protection for those varieties, they have developed. This Act also has some provisions which deal with food security. After adopting the Act, Indian parliament made amendments in the Patents laws to full fill the obligations of the TRIPS Agreement such as change in the patent term, the legislature increased it from 14 to 20 years and from 7 to 14 years in the case of patent on food related inventions. The amendment in 2002 in patent laws inserts the provisions for the development of agrobiotechnology. But there is clearly exclusion on patents that are anticipated from traditional knowledge.

Beside these laws (the plant variety and patent legislation), the Biodiversity Act is most important for the food security because that legislation is directly linked to IPRs and biodiversity management.

"The different legislative changes introduced in India will have profound impacts on the developments of IPRs based industries such as agro-biotechnology and on food security. From a legal point of view, the adopted regime is noteworthy for attempting to reconcile to a certain extent towards India's international obligation with its domestic priorities. However, on the whole, it is unsure whether India has managed to provide a balance which puts food security concerns at the forefront and serves its interests."¹⁸

CONCLUSION

To sum up the above, it is clear that the Intellectual property is closely connected to food security and safety especially in the developing countries. A better law of Intellectual Property or we can say an efficient and effective IP laws provide the good environment for

the innovators to invest their mind and invent new technologies, to engineer viable seeds for mass production of food to ensure food security. In the patent laws where the issue comes that plant or plants' mechanisms should be patented, there should be introduced some exceptions which will be equivalent to the right secured in plant variety protection i.e. farmers' rights. In the country, a good patent law according to the international treaties which clearly said no patent can be granted for protection of plants, their parts and any plant components must be enacted. But in any circumstances the patent is granted, there should be introduced some features like how it can be clearly made distinction between a mere discovery and in the invention done with the inventive steps; government should introduce the laws in respect of plant variety safety where the inventive steps and the novelty are rigorously examined; the farmers have to allow to save, secure and reuse of the seeds.

The Parliament should amend the laws regarding the protection of protected plant by issuing compulsory licenses for those acts where PVP exploitation would infringe a patent right. The member countries must take some essential steps to exclude the plants from providing patents on these things, although these inventions maybe genetically modified or not modified. In the past time, it was allowed for the farmers and breeders to share information and materials and to contribute a sustainable supply of seeds. In the past, there is no case that has provided the information to detect that the patent laws can provide an important incentive for innovations in the field of agriculture, so that the granting of patent rights for plant generic resources may put food security on risk.

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End Notes:

¹ Quotation by Roger Williams

² Article 21 of Constitution of India

³ See Special Rapporteur on the right to food, De Schutter, O.(2009), Seed policies and the Right to food : Enhancing Agro-biodiversity, Encouraging Innovation, Report (A/64/170) presented at the 64th session of the UN General Assembly (21st October 2009), available at:

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⁴ See, e.g. Chiarolla, c. (2011), Intellectual Property, Agriculture and Global Food Security. The Privatisation of Crop Diversity, and Jackson, L.A. (2000) “Agricultural Biotechnology and the Privatisation of Genetic Information.

⁵ Thus, seed certification laws may encourage the planting of a limited number of commercially developed varieties, while discouraging the diffusion of farmers’ varieties better adapted to local conditions. The possibility of obtaining, in many cases, higher yields and increased income than with farmers’ varieties also favours the diffusion of the former.

⁶ As exemplified by the Doha Declaration on the TRIPS Agreement and Public Health, adopted by the 4th WTO Ministerial Conference in November 2001.

⁷ The cultivar is a race or variety of a plant that has been created or selected intentionally and maintained through cultivation. Asexual reproduction is the reproductive process that involves only one organism and results in two or more organism, which can preserve unaltered certain desired traits.

⁸ UPOV 1978, Article 2(1).

⁹ Available at: www.fao.org/ag/cgrfa/iu.htm

¹⁰ Available at: <ftp://ftp.fao.org/docrep/fao/011/i0510e/i0510e.pdf>

¹¹ Available at: www.cbd.int/convention/convention.shtml

¹² For a comparison of the scope of rights conferred under patents and UPOV 1978 and 1991, see Jordens, R. (2002), Legal and technological Developments Leading to this symposium: UPOV’s Perspective, WIPO-UPOV Symposium on the Co-Existence Of Patents and Plant Breeders’ Rights in the Promotion of Biotechnological Developments, WIPO-UPOV/SYM/02/2, p. 3.

¹³ Some national laws refer to living organisms, ‘in whole or in part’, thereby preventing the patenting of any components of plants. See WIPO (2009).

¹⁴ As defined in Article 28.1 of the TRIPS Agreement.

¹⁵ Carlos M. Correa TRIPS-Related Patent Flexibilities and Food Security, option for developing countries, September 2012/ QUNO-ICTSD

¹⁶ See generally Justice N. Rajagopala Ayyangar, Report on the revision of the patents law (September 1959)

¹⁷ Section 3 of the Patents Act, 1970, Act 39 of 1970. [hereafter, reference to the patents act, 1970 indicates a reference to the Act as it was until the adoption of the 2002 amendments]. See also, C.S. Srinivasan, ‘Current Status of Plant variety protection in India’, in M.S. Swaminathan ed., *Agrobiodiversity and Farmers’ Rights* 77 (Delhi: Konark, 1996).

¹⁸ Food Security and Intellectual Property Rights in Developing Countries, Dr Philippe Cullet, IELRC Working paper 2003-3; <http://www.ielrc.org/content/w0303.pdf>