## THE INTELLECTUAL CONTRIBUTION OF FARMERS AND PLANT BREEDERS IN DEVELOPMENT OF NEW PLANT VARIETIES IN INDIA - A LEGAL PERSPECTIVE

By Kirti R. Kulkarni<sup>132</sup>

Food is an unending need of living being particularly human beings and the animal kingdom. With growing population and emergence of food industries the demand for food is ever increasing. Whereas on one hand the demand for food is increasing and on the other hand the total available land area is fixed and added to that because of increasing industrialization along with it rapid conversion of agricultural lands for non-agricultural purposes, the total available cultivable land is reducing. This has brought about serious problem of food security. There is alarming rise in prices of food articles because of its acute shortage. The solution to this is increasing food productivity by development of high yielding new plant varieties. The answer lies in use of bio-technology for development of new plant varieties. The role is also cut out for plant breeders. However the problem is any new variety of plant can be developed only by using the existing genetic resources and the farmers have silently contributed to the development and evolution of the genetic resources.

Thus in order to promote development of new plant varieties the contribution of the developers, whosoever it may be needs to be recognized and protected, the interest of Farmers who have silently made contributions also need to be recognized and protected. Thus the area of intellectual property of plant breeders and farmers creates the problem of balancing the competing values and interest. Any legal regime whether international or national must, therefore reflect the due consideration and articulation of these conflicting and competing interest.

In India plant variety protection law is one of the nascent branches of intellectual property that has several facets. Till not for long and even for majority of farmers in India agriculture is not a business activity but a matter of culture. However, notion of property is based upon the psyche of commerce. Therefore before our farmers could start asserting their intellectual property in their contribution to the development of new plant varieties either directly or indirectly much time will pass as this realization is going to take longer some intermediate mechanism which

INTERNATIONAL JOURNAL OF LEGAL DEVELOPMENTS AND ALLIED ISSUES

<sup>&</sup>lt;sup>132</sup> Member, District Consumer Forum, Mumbai Suburban, Bandra, Mumbai

could act like trustee of the Indian farmers' interest is imperative. However, the present legislation suffers from a serious drawback in failing to create such mechanism.

So as to protect the rights of the farmers in respect of their contribution made at any time in conserving, improving and making available plant genetic resources for the development of new plant varieties India being signatory of the Agreement on Trade Related Aspects of Intellectual Property Rights having ratified the said Agreement made provision for giving effect to the Article 27(3)(b) in part III of the said Agreement has enacted the Protection of Plant Varieties and Farmers' Rights Act 2001 in order to fulfill its obligation under the said Agreement. As the theory of dualism governs the relationship between Public International Law and Municipal Law in India.

It cannot be forgotten that the farmers have played and continues to play an important role in the development and conservation of plant genetic resources have suffers silently the injustices perpetuated upon them because of the rampant exploitation of the plant genetic resources without their consent. They suffer injustices also because never was, in the past, the benefit arising out of the exploitation of the plant genetic resources was shared with them. The present paper highlights the provisions of the TRIPs Agreement and India's Protection of Plant Varieties and Farmers' Rights Act which have the potential of undoing the justices done to the farmers and plant breeders. The present paper is a descriptive note on the relevant provisions of the said two legal instruments.

## **PART I : THE TRIPS AGREEMENTS**

The issue of intellectual property of farmers and plant breeders is a vast one. Before the existence of any International Convention, it was difficult to obtain protection in many countries due to the diversities in the National Laws. Globalization necessitated harmonization of industrial law. The recent development in the field of biotechnology and plant breeding had led to wide spread piracy of resources from the developing countries. Intellectual property protection provided by countries varied and this disparity was an occasion for developing countries to pirate the technological development of the developing countries. The developed countries under the leadership of United States wanted to have a strong system for the protection of new technologies. Hence the issue of intellectual property protection and also protection of new plant varieties was addressed in Uruguay Round of General Agreement on Tariff and Trade.

The minimum requirement for protection of intellectual property in plants varieties is defined by TRIPs Agreements. While plant varieties are only refereed to once in the TRIPs Agreement. TRIPs requires that all WTO member States adopt legislation for the effective implementation of plant variety protection, including enforcement. In order to be in conformity with the TRIPs Agreements there must be in place an effective sui generis system for plant varieties. Whereas according to the Agreement on trade related aspects of intellectual property in a case of a genetically modified plant variety a person would be entitled to a patent and in other cases he/she should be entitled to protection under a sui-generis system. There is no definition of 'effective sui generis system'. When a TRIPs Council issued a document, consisting compilation of the responses to a questionnaire within the scope of the review of the Article 27.3(b)the term effective was not applied. The development of plant variety protection seemed to have provided the appropriate solution to the question of industrial property protection for plants and there was little debate on the suitability of the system. Nevertheless, this matter has reappeared in a very intensive form most recently. The success of plant Breeding, the size of the seed market and its growing internationalization have made this area attractive for branches of industry outside the traditional breeding industry.

A significant contribution has been made by the knowledge of indigenous people and traditional farmers in the development of new crop types and biodiversity conservation. These groups have been an important agency in the conservation of plant genetic resources and the transmission of these resources to seed companies, plant breeders and research institutions. **Farm women and men have not only created several thousand races of food and cash crops, they have also identified valuable genes and traits in these crops and maintained them over generations.** TRIPS Agreement provides that members may exclude essentially biological processes for the production of plants or animals other than non-biological and micro-biological processes. However, the Agreement states that members shall provide protection of plant varieties either by parents or by an effective sui generis system or by any combination thereof<sup>133</sup>. Considerable flexibility is left to the members of the Agreement, India was obliged to provide either a patent protection or a sui generis system of protection for plant varieties.

<sup>&</sup>lt;sup>133</sup> See Art.27.3(b) of The TRIPs Agreement

From the above discussion one inescapable conclusion which emerges is this that the Agreement is only a frame work legal instrument leaving it to the state parties to establish an effective and efficient system for protecting Plant Varieties, Farmers' Right and the right of Plant Breeders and developing new plant varieties of plants. Therefore, in the opinion of the present author, if State party chooses not to assign any role to the Farmers and Plant Breeders in its domestic legislation dealing developing new plant varieties of plants and sharing of its benefits arising out of its utilisations. With this position in the background lets now turn to India's legislation enacted for the purpose of attainment of the objectives of the TRIPs Agreement. Being an agrarian economy, patent protection for plant varieties was not considered to be in the interest of the country and India adopted for sui generis legislation.

## PART II - INDIAN PROTECTION OF PLANT VARIETES AND FARMERS' RIGHTS ACT 2001.

As mentioned above India enacted the Protection of Plant Varieties and Farmers' Rights Act, 2001 (53 0f 2001). It was published in the gazette of India on 30 Oct. 2001 and some of the provisions where brought into force on the same date. In other words India has taken a transition period to implement the provisions of the TRIPs Agreement which has come into force into 1995. It is strange to believe that an agricultural economy based country which is constitutionally committed to organize agriculture<sup>2</sup> on modern and scientific lines and to preserve and improve plant varieties within its territory needs six year to implement its international obligation on the important issues of protection of plant varieties.

We that as it may be finally at least we have in India a special legislation on the issue of Conservation and development of new plant varieties, in spite of their being a general environmental legislation. It is heartening to find that in spite of there been no specific mandate under the TRIPs Agreement to assign any specific role to the farmers, indigenous and local communities in the matter of conservation and evolution of any variety, the Indian legislation has crafted specific provisions with respect to the contribution of the farmers and the local communities in development of a new variety, conservation of genetic resources of land races. It will be worthwhile to note those relevant provisions.

According to Sec. 3 of the Protection of Plant Varieties and Farmers' Rights Act, 2001 that the Protection of Plant Varieties and Farmers' Rights Authority are responsible for promoting conservation, sustainable use and documentation of varieties<sup>134</sup> including conservation of land

<sup>&</sup>lt;sup>134</sup> See. Sec 8 of the Protection of Plant Varieties and Farmers' Rights Act, 2001

races, extent varieties, farmers' varieties, ensuring that seeds of the varieties registered under this Act are available to the farmers and providing for compulsory licensing of such varieties if the breeders of such varieties or any other person entitled to produce such variety under this Act does not arrange for production and sale of the seed in the manner prescribed under the Act. Sec. 8 sub clause 1 of the Act gives mandatory provision that the duty of the Authority to promote, by such measures as it think fit, the encouragement for the development of new varieties of plants and to protect the rights of the farmers and the breeders. As per sub clause 2(f) of the Act that the Authority may provide for collecting statistics with regard to plant varieties, including the contribution of any person at any time in the evolution or development of any plant variety in India or in any other country, for compilation and publication. The Authority shall develop DUS test and other test criteria and conduct such tests for characterization of each variety of crop species notified by the Center Government.

Sec 45 of the Act made special provision for National Gene Fund. It enables the Central Government to credited the benefit sharing received from the breeder of a variety or an essentially derived variety registered under this Act, or propagating material of such variety or essentially derived variety, the annual fee payable to the Authority by way of royalty, the compensation deposited in the Gene Fund and the contribution from national and international organization and other sources will be credited into such fund.

The Authority shall pay the amount of benefit sharing, compensation required for use of genetic material towards evolution of new and essentially derived variety, to meet expenditure incurred for conservation and sustainable use of genetic resources and for the framing of schemes related to benefit sharing.

According to Sec 45(2)of the Act this fund will be used for conservation and sustainable use of genetic resources including in-situ and ex-situ collections and for strengthening the capability of the Panchayat in carrying out such conservation and sustainable use and the expenditure of the schemes relating to benefit sharing for the purposes relating to breeding, discovery or development of varieties and all matters connected with such registration of varieties and the maintenance and audit of accounts framed under section 46.As per the rules 70, the Gene Fund will be used(a) to support and reward farmers, community of farmers, particularly the tribal and rural communities engaged in conservation, improvement and preservation of genetic resources of economic plants and their wild relatives, particularly in areas identified as agro-biodiversity hot spots (b) for capacity building on ex situ conservation at the level of the local body, particularly in regions identified as agro-biodiversity hot spots and for supporting in-situ conservation, (c) on benefit sharing and compensation and (d) on transaction cost of administrating the Gene Fund.

**FARMERS' RIGHTS**: According to Sec. 39 of the Act, the new variety developed or bred by a farmer be entitled for registration and other protection as a breeder of a variety. The farmers' variety shall be entitled for registration if the declaration as specified in section 18(1)(h) of the said Act be complied. The farmer shall be entitled to save, use, sow, resow, exchange, share or sell his farm product including seed of a variety protected under this Act but the farmer shall not be entitled to sell branded seed of a variety protected under this Act. As per Sec. 44 of the Act, a farmer or group of farmers or village community shall be exempted from paying of any fees in any proceeding before the Authority or Registrar or the Tribunal or the High Court which includes any fees payable for inspection of any document or for obtaining a copy of any decision or order or document under this Act. Thus, the Indian legislation has crafted above provisions and funding mechanism for conservation and sustainable use of plant genetic resources.

## **CONCLUDING REMARKS**

In India plant variety protection law is one of the nascent branches of intellectual property that has several facets. The effect of international developments is that there is now a common understanding to project plant varieties. India has been party to all the major international developments in the realm of evolution of new norms. Though relatedly yet positively India has taken steps to implements its international obligations, living within the constraint arising out of India's political, social, cultural and economic conditions. Being a signatory to the TRIPS Agreement, India was obliged to provide either a patent protection or a sui generis system of protection for plant varieties. Modern biotechnology utilizes the traditional varieties and is only improvements of the breeding carried out by generations of farmers. Yet, little consideration is given to the contributions of these farmers. Therefore, it is essential that both the farmer and the breeder are protected for such genetic improvements. Though the Indian legislation on protection of plant varieties rightly acknowledges and articulates the role of indigenous and local communities as a farmers and plant breeders in the matter of conservation and development of plant genetic resources. It was painful to learn that in spite of the decade old history of this legislation the Central govt. of India are yet to constitute Appellate Tribunal which is the mandates of Sec, 54 of the Act. The Sec.89 of the Act clearly stated that no civil court have jurisdiction in respect of any matter which the tribunal is empowered by or under this Act to determine. The Act made transitional provision in Sec. 59 of this Act till the establishment of the Tribunal under section 54, the Intellectual Appellate

Board shall exercise the jurisdiction, powers and authority conferred on the Tribunal under this Act subject to the modification that in any bench of such Intellectual Property Appellate Board constituted for the purpose of this section, for the technical member referred to in Sec. 84(2) of the said Trade Mark Act, the Technical Member shall be appointment under this Act and he shall be deemed to be the Technical Member for constituting the Bench under the sais Sec 84(2) for the purpose of this Act. But after passing fifteen years of the Act, neither Technical member appointed till date nor IPAB exercises jurisdiction over Protection of Plant Varieties and farmers' rights as on date. It is a serious shortcoming of our administration and yet one more example of our dishonesty in implementation of laws resultantly denying justice to the people.