Human beings are the most intelligent among the creatures of the Earth. That is what they believe. However, they are only part of the system, and not the centre. Every creature has its own value and position in the system. Human activities often forget this fact. They tend even to propertise other creatures or living things. Actually in the ancient scriptures of India like Ramayana and Mahabharata, Puranas, and Vedas almost every creation has prominent places, and many are even worshipped. The five elements called the Earth, Water, Fire, Air, and Space without which life is not possible, are given a divine place, and the first four elements are actually worshipped as Gods. (Earth as Goddess Earth, water as Lord Varuna, Fire as Lord Agni, and Air as Lord Vayu). Almost all animals, birds and trees are respected for one reason or other. To illustrate, rat, lion, ox, tiger, elephant, cow, snakes, parrot, peacock, banyan tree, Thulsi, koovalam, neem tree, and karuka grass, are worshipped as associated with Gods either as their favourite, or as their vehicles\(^1\). The trees mentioned here are all of immense medicinal values. And even though in the name of religion, what is done is the conservation and preservation of many medicinal plants, animals and trees and thus biodiversity. The “kavu”, where the Snake King (Naga Raja) is worshipped helps in preserving the thick forests in many places.

---

\(^1\) Rat is supposed as the vehicle of Lord Ganespathi, lion as that of Lordess Durga, tiger as that of Lord Ayyappa, elephant as that of Lord Indra, peacock as that of Lord Muruka, and Ox as that of Lord Siva. Snakes are worshipped due to many reasons. One, snakes themselves as Gods. The other is due to the snakes’ association with Lord Siva as his ornament, and with Lord Vishnu as his seat. Snakes are also equated with the Kundalini, and also with salvation.
But this culture gave way to modernization, and is now condemned as mere dogma. Thus, this culture is practiced only by a minority even in its birthplace called India. Elsewhere the culture was totally different, especially in the western countries, where human beings consider themselves as the centre of the universe, and every other creature as goods for consumption. In such a culture, propertisation of anything is possible, because everything, including living things is just commodities, with commercial value. This is reflected in the Locke’s theory of property, in Hegel’s theory of property and any other property jurisprudence, where they advocate that when a person catches a bird, that bird becomes his property. (This is exactly opposite to the above mentioned concept of human beings’ relation with nature and the living things around them in the Indian tradition.) As Science and technology developed, this human nature which considered everything as property got different dimensions. For finding out the hidden mysteries of nature, property right is given. Patent laws allow patenting of even living things over which the holder is given exclusive right. For having found out peculiarities of certain plants also patent was given. However, patenting of life forms was condemned by many countries, as they believe that natural things are not to be the property of anyone. However, for the efforts involved in breeding new plant varieties were to be recognized also. Thus, a new type of IPR was to be created.

It is as a solution to this that the Plant Breeders’ Rights (PBR) emerged. That means the countries which consider patenting of life forms as opposed to morality shall opt for PBR. But slowly, even the PBR took the shape of patent right, or even more. Due to this development, the sufferers or losers were the most important segment
of the society called the farmers. This is because many of their freedoms were curtailed due to PBR. While the efforts of the plant breeders for having developed a new variety were recognized in the form of exclusive intellectual property rights, the farmers who spent even their lifetime for conservation and preservation of certain varieties are given no property right at all.

Though the word Farmers Rights (FR) is used as the counterpart of PBR, in essence, they are in no way comparable. While the latter is a solid, concrete and well defined property right, FR is yet to be even conceptualized. Even the definition given in the international documents for FR is only a skeleton. International law is also not addressing the issue of FR in any document which exclusively deals with FR. On the contrary, FR is defined in a document which is for preservation of plant genetic resources for food and agriculture (PGRFA). This means that increased food production is the main aim of the document, and FR is respected just because they make available the PGRFA for plant breeding, or for any other research purposes. PBR is very strongly implemented as it forms part of the TRIPS. The International Convention for the Protection of new Plant Varieties (UPOV) is also followed by countries without much change as it is considered as the model international law for the protection of PBR (sui generis law in the language of TRIPS). Such a strong background is lacking in the case of FR.

All these make these two rights as totally different, and they are as different as chalk is from cheese. In fact, the conflict between these two rights mainly occurs when the plant breeders seek access to the plant genetic resources (PGR) and traditional knowledge (TK) of the farmers, and when farmers try to use the PGR of the
protected variety. Any law which addresses the issues of FR will have to concentrate on these two areas. The plant breeders’ rights and their relationship with the newly bred variety is very clear. However, no serious attempt is done in the international level to solidify the farmers’ relationship with the PGR or TK conserved or preserved by them. The main reason for this is the difficulty in identifying even the country of origin of certain PGR or TK, as they have become so commonly available and known. So, to find out even a particular community within a country as the holders of certain PGR or TK is even more difficult.

This has prompted the international law to take uneven shapes. In fact this difficulty has driven international law to leave the core matters to the State parties. So, what is found in the international law is that only certain residuary rights (rather privileges) are attempted to be given to the farmers. However, these attempts created many unknown concepts like seeking of prior informed consent (PIC) of the farmers before access is given, and benefit sharing of at least two types- bilateral and multilateral. These two types of benefit sharing are also the outcome of the difficulty in identifying the conservers or preservers of certain PGR or TK. However, these are not yet in the form of rights in the international level. But enough space is left for the State parties to develop them into rights. These are the moot problems in the area of plant breeders’ access to the PGR or TK of the farmers.

As was stated in the context of PBR, the strength of it lies in the fact that it is a recognised right in the TRIPS. So, for FR to be at par with PBR, FR should also find a place in the TRIPS. In other words, FR should also be given the status of IPR. But then there is a
problem. Most of the existing IPR are private, temporary and alienable rights, as against the FR which are collective, and inalienable, and which requires permanent protection. Can FR be included in TRIPS then? This is also another area pondered into by this thesis.

Coming to the other area, of farmers’ access to the PGR of the plant breeders, the things are slightly different. Here, the farmers are now seeking access to an exclusive property. The PBR created by the UPOV 1991 is preventing anybody else (without authorization) from producing, reproducing, marketing, distributing, selling, or even saving the propagating material or the harvested material of the protected variety. Only if the PBR gives a space for the farmers in the form of an exception, that the farmers can use, re-use, save, exchange or sell farm saved seed of the protected variety. Though UPOV has given a space in the form of an optional exception, it does not cover all these rights. However, another international law in the same field mandates the States to give to their farmers all these rights. This is an area of anomaly which the thesis is trying to solve.

Also, the re-use of the protected variety can be substantially controlled by the genetic use restriction technologies (GURT) like terminator technology. This is also another area of problem for the farmers. Quite naturally a question may come to the mind of the reader here. Why should the farmers try to use the seeds of the protected variety, as nobody prevents them from using their traditional seeds? The justification for giving this right is also tried to be given in the thesis, while discussing on farmers’ right to use, save, exchange and re-use the seeds, based on the history of farmers.
The international laws which deal with the farmers’ right to use, save, exchange and sell the seed are the UPOV, and the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA). The international laws which deal with the rights of the farmers while access is given to the plant breeders to their PGR and TK, are the Convention on Biological Diversity (CBD), and the ITPGRFA.

With this international scenario in the background, this thesis proceeds to the situation of farmers in India, in the context of PBR. Farmers were always subject to exploitation and torture in India throughout her history. Except during the reign of Chandra Gupta Mourya, in no other period in history farmers were given enough recognition for their efforts in feeding the world. They were considered only as the means for extracting revenue. For this purpose, they were always treated very cruelly as the history says. Though the farm produce were the attraction of their blood suckers, the PGR or TK were solely left to them. But with the advent of gene technology, the PGR and TK assumed great economic significance and thus, the so called worthless things suddenly turned to be gold. This is like the hiking of the price of land when a development takes place in the vicinity.

This changed scenario gave the PGR and TK, and their holders some importance. India being an immensely rich country in biological diversity, and also a country whose economy is based upon agricultural economy has a very great responsibility in recognizing the rights of the farmers over their PGR and TK. She has also the great responsibility of filling the gaps in the international law in a very fruitful manner. However, this is possible only if all the PGRFA in the
country, and the holders of the same are identified. So, legislation to that effect is also necessary. This thesis is examining the legislation/legislations in India in this regard, with their effectiveness. The thesis also examines the legislation/legislations which deal with the farmers’ rights over their PGR and TK, and the farmers’ rights when access is given to the plant breeders to their PGR and TK.

The legislation which deals with identification of PGRFA, and the rights of the farmers when access is given to the plant breeders to the PGRFA and TK is the Biological Diversity Act (BDA). The legislation which deals with the farmers’ right to use, save, exchange and sell the seeds, and benefit sharing, and some additional rights is the Protection of Plant Varieties and Farmers’ Rights Act (PPVFRA). India has benefit sharing provisions in both BDA and PPVFRA. PPVFRA gives PBR to the farmers who developed new varieties using traditional methods. It also gives property rights to the farmers’ varieties by registering them. India is the first country in the world who registered the farmers’ variety. PPVFRA gives farmers all the rights over the PGR of the protected variety, and also added rights when using the seeds of protected variety.

This seems to be a perfect situation, and the best utilization of the space in the International laws. This will also make a reader to think that PPVFRA is an *effective sui generis* law for the protection of FR. *However*, things are not that rosy. Behind this colourfulness lie some grave problems with both the legislations. If in the case of BDA the problems are very obvious on the plain reading of the legislation, in the case of PPVFRA, the problems are revealed only after an in-depth analysis of the Act, with the help of Rules and Regulations. What are the problems? How can they be solved? These are the major
questions that are tried to be answered in the area of Indian legislations. Lessons from various legislations in the world are drawn for suggesting solutions.

With this introduction, this thesis moves to Chapter I which deals with the areas of conflict between the FR and PBR, and the need for balancing them. This Chapter also deals with the history of FR and PBR in the international law in order to find out the background, and politics which played behind their development, or shrinking as the case may be. The history of farmers in India is also traced to find out what all were their freedom on farming down the ages, mainly to find out their freedom or control over the seeds. Depending upon the situation, (farmers’ access to the PGR of plant breeders, plant breeders’ access to the PGR or TK of farmers) farmers require different sets of rights. Due to the diversity of the persons who are related to agriculture, there are different types of farmers who need certain rights. The holder of PGR, the holder of TK, and the farmer who accede to the PGR of the protected variety can be three different persons/group of persons. So, separation of farmers for the purpose of entailing rights is different, which makes defining the farmer a necessity. So, a “definition of farmers” is attempted in Chapter I. A jurisprudential analysis of these rights based on the theories of John Locke, Hegel, and Marx is also attempted in a brief manner, in order to churn out a case for property rights for farmers.

Now let us move to Chapter I, Farmers’ Rights and Plant Breeders’ Rights- Areas of Conflict and need for balance.