

## **CHAPTER V**

# **CONCLUSION & SUGGESTIONS**

## **Conclusion & Suggestion**

IPRS play an important role in national economies today. Industrial advancement is to a great extent dependent on intellectual property rights. Even India is moving from brick and motor economy to knowledge economy. The wheels of this new economy are intellectual property rights. For exploiting IPRS a user needs permission and such permission ordinarily come by paid for it. By which way a nation will get wealth and greater development of economy takes place.

The following conclusions have been emerged from the present study of “Intellectual Property Rights” in Agriculture sector.

1. Intellectual Property Rights [IPRs] play an important role in national economies.
2. The total number of patent fillings in India is extremely low as compared to other countries of the world. Most of these patents are filled by foreigners. There is a big gap between the numbers of patents filed and granted. The number of patents in force i.e. those active and valid is also decreasing over the years. These features point a dismal finger at the R and D activities and the IPR status in India.
3. India needs a strong physical infrastructure with a top class patent office. There is also need to increase the number of patent examiners. India is having barely 30 compared with 300 in China and 3000 in U.S. Scientists need to be more patent savvy. Every innovation must be patented before publishing. Also India is having very few patent attorneys. Law school curricula must include a content of patents.



4. An awareness about patents and other forms of intellectual property protection must be created, that if patents are granted and exploited, then wealth can be created and for this purpose, entrepreneurs, technologists and scientists, agricultural officer must be given exposures through seminars and symposia to farmers. There is a need to generate patent data of agricultural innovations in our country.
5. In each Agricultural University, there should be separate “thinking tank” of intellectuals to have in depth study of each and every aspect of patent in near future.
6. Need to set up a fully equipped patent systems which will deal with the registration of IPRs and control of anticompetitive practices in contractual licenses.
7. There is a need to persuade Indian industries for investing a portion of their profits into R & D so that domestic consumers can benefit from lower prices and greater choice. On adoption of a plant variety protection system with due consideration to farmers, rights, community rights and plant breeders rights, and food security situation in the country will be changed.
8. Diversify Indian agriculture according to the needs of the consumers and future export potential.
9. Adopt innovative methods to induce public as well as private investment in agriculture, including investments in R & D on biotechnology.

## Suggestions:

- 1) The rights of local communities and farmer breeders in land races as well as recent improvements in these land races, could be a major source of stability in food supply in the wake of fluctuating climate and other environmental conditions. The incentives for decentralized breeding by farmers on their own, with or without partnership of scientists will help make the goal of generating diversity in genetic base a realizable goal. A registration system of land races will have to be developed to recognize the community rights in these races. Indian Plant variety and farmers Right Bill (hence forth, Indian PFRB), makes a very bold attempt in this direction which has not been tried by any other country whose PVP bills has been reviewed here
- 2) Monetary as well as non monetary incentives for individuals as well as communities as advocated by Honey Bee network and SRISTI for last 10 years are essential if the asymmetry in the rights of invitational and informal breeders has to be reduced and eventually eliminated. Without wider participation in production of IP such as plant varieties, a diverse country of India's size can not grow in a sustainable manner in future. France offers in interesting model in which small formed co-operatives dominate the seed industry instead of large multinational corporations. The preference for taste by consumers canbe harnessed for promoting decentralized co-operative and small scale entrepreneur based seed industry. The public sector research institutions will have to provide hand holding support to such co-operatives and entrepreneurs. There is no policy for encouraging small scale breeders. Recently when a farmer bred variety of groundnut 'morka' (developed by Takarshee bhai) was taken up

by ICAR's AICRIP on ground nut, the NGO SRISTI had to arrange the seed required for multiplication trials. Despite good intentions, the scientists concerned had no provision, to pay for seeds of such small farmer breeders. This incidentally was the first time in last 50 years, that a farmer bred variety had been taken up for All India trials. Such cases must multiply and so on.

- 3) There must be a registration system for encouraging protection of local and races and incentive system must be generated for in -situ conservation 10% of under threatened land races by productivity multiplied by price to equal similar productivity price equivalent of modern variety in that area. Thus a farmer selected through random lottery will be eligible for such an incentive only if he /she had grown land race. A national register must also be developed for other herbal innovations. The Indian PFRB provides for registration of not only extant varieties but also farmers land races by communities or NGOs.
- 4) National database on local varieties with systematic documentation of local knowledge of women and men is very necessary. For making our breeding system responsive to global demands, we must know which land races can offer genes for which kind of characters. Only agronomic evaluation is not sufficient. The local knowledge of farmers, families is very valuable but almost completely absent from passport sheets of ex-situ genebanks. This is a task, which will pay dividend quickly if given high level attention.

- 5) We have to create a knowledge Network, which will connect creative farmers, scientists and policy makers in real time so that macro policy can be responsive to micro level innovations, and other urges.
- 6) Demand for organic food and spices is increasing world over but we still do not have decentralized arrangements for certification by NGOs, and public sector research organizations (exceptions apart).
- 7) Sustainable technologies : Out exports are getting affected in some of the sectors by pesticides residues. National technology mission on non chemical technology devt. Is must and this should not restrict its scope to innovations by formal centres of research alone. Informal innovation should also get the same attention.
- 8) Accelerating working efficiency by appointing additional staff of patent office.
- 9) Amendment in patent law as per the changing situation is essential.
- 10) Documentation of biodiversity wealth will facilitate to solve the problems related to patent at fast speed. Documentation can yield some concrete documents which can be consulted by patent office anywhere in the world while, granting patents and settling patent disputes.
- 11) Patent literacy patent literacy pertains to the fact that many persons do not the prerequisites of patents. They are only aware of the fact that inventor should file a patent application before publishing his invention patents applied for by different countries (2000).