CHAPTER III REVIEW OF LITERATURE

- 1] Erich Habin opined in his article named 'The impact of TRIPS on developing countries", that developed countries are regarded as innovators and suppliers of products whereas developing countries serve as markets. TRIPS is tailor made for developed countries but disregards essential differences between capabilities of countries in the North and those of South. In 1990, only 4% of world's R and D expenditures came from developing countries which makes clear who will benefit most strengthened IPRS regimes.
- 2] Dr. Prakash, agricultural economist and editor of Farmer friendly journal II Hittalgida revealed in his article named "Impacts of WTO on Indian Agriculture", CAAM Bulletin, that the IPR under WTO restrictive and narrow one. It advocates for (i) Patenting of life form, (ii) Exclusion of traditional knowledge (TK) patenting and (iii) they do not recognize farmers as breeders, these in turn would block or restrict the free access to farmers and even scientists, the required genetic material for future use, research and innovations. Also the increased market concentration and enhanced control by a MNCs for agricultural inputs and outputs would further few Northern wrosen the already existing global income disparity between the rich North and poor South. The expected gain to members of WTO from the Third world [125] or almost 4/5 of the total WTO member] together is hardly \$ 116 billion or the 23 % of the projected benefits. Biotechnology accelerates the depletion of earth's resources. Genetically Engineered products pose greater risks to our environment in the long run.

- 3] Prof. Falendra K. Sudan opined in his article "WTO, IPRS and Indian Agriculture", that India is an urgent need for a good bio-diversity strategy and will to implement it. We need to understand that bio-diversity and ecosystems cannot be sacrificed. Farmer's Rights are a necessary component for the conservation of agricultural bio-diversity. In the context of agricultural bio-diversity, Farmer's Rights recognise the creativity of farmers protect the livelihoods and restrict IPR monopolies. In order to protect farmer's rights, it is essential that access of such genetic material be made conditional on negotiations between the parties in acquiring the material and communities concerned and their governments.
- 4] Dr. V. K. Deshmukh in his article named "Intellectual Property Rights and Indian Agriculture", stated that , ninety percent (90 %) of share of the market is handled by members of WTO. Indian farmers are also in confusion position about WTO and IPR. India is having very rich genetic resources and biodiversity. So if proper guidance and knowledge given to farmers about IPR and by which way they should produce with respect to words choice then there is a very good opportunity to becoming India as superpower in future. But for this, India is urgently needs following things.
 - (i) India is needed of taking the patents of fruits, flowers, spices, medicinal plant etc.
 - (ii) To acknowledge the people / farmers about trade name and GIS in agriculture sector.
 - (iii) Registration or documentation of traditional knowledge for further R and D.

- (iv) There is need of Advisory Committee of IPR, at different levels, by which way, India and Indian farmers could get a chance to obtain patents.
- 5] The article on "Innovations in Science, Technology, Process" suggests that India has over 2000 institutions engaged in higher education and research in the field of science and technology. In spite of this, the number of applications filed for patent registration during 2000 has been pathetically low at 90. However the Indians with international exposure have filed 60,852 patent applications. In India number of applications filed for patent registration has been miserably low at 59 per million population, while in some countries it is over 20,000 per million population during the same period.
- 6] Prof. Anil Gupta and R. S. Naryana stated in his article namely "Patents on Microbes", that India is one of mega-diversity center in
- world . German MNC, has smuggled over 90,000 Indian soil samples to frankful research and screening. Indian custom authority is not aware of the importance of microbial diversity and hence does not imagine that these soil booty. They could not imagine that these soil samples are valuable as diamonds at a later date.
- 7] R. T. Gabukar presented in his article name "Patents and Indian Agriculture", that patents provided technical incentives and served as an effective tool for the economics growth which is reflected by four-fold increase in food production and five-fold increase in irrigated land after the introduction of 'Green Revolution' technologies in the late sixties.

- 8] Smt. Y. Indira Kumari and B. Sambasiva Rao, presented an article namely" Intellectual Property Rights and its relevance to Indian Agriculture" and suggest some measures for future which are given below-
- (i) India should seize this initiative to do some creative thinking and craft creative and Sui-Generis legislation so that an era of gene exploitation would go away and true rights to our Genetic resources can be achieved.
- (iii) India's Sui-Generis system must recognise the farmer's right.
- 9] The article namely "Patents act changes allow domestic inventions to apply for patents", stated that, during the period from 1st, January, 1995 to Oct. 31,1999 India have been filed 2994 applications for product patents and 494 applications for agricultural chemical products.

References:

I] Book-s

- 1. "The Indian Economy under Globalisation Process" edited by K. Sham Bhatt 2003.
- II] Various articles from Magazines and news paper -
- 1. Magazine of 'Krushi Panan', (vol. 7, March ,2005) by Dr. V. K. Deshmukh, article "Intellectual Property Rights and Indian Agriculture".
- 2. Magazine of "Kisan World", (vol. 31, No. 12, December 2004), by R. T. Gabukar, article on "Patents and Indian Agriculture".
- 3. News paper of "Economic Times", (December 25, 1999), article on "Patents act changes allow inventions to apply for patents".

III] Web-sites -

- 1. Article on "The impact of TRIPS on developing countries", http://www.wu-wien.ac.at/usr/h99a/h995o236/iprs/impact.htm#top.
- 2. Article on "Impacts of WTO on Indian Agriculture", CAAM Bulletin, http://www.farmmedia.org/bulletins/bulletin10html
- 3. Article on "Patents act changes allow domestic inventions to apply forpatents", http://www.A://Patentsactchangesallowdomestic.inventionstoapl yfor patents abroad.htm.