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Intellectual property is a world wide accepted phenomenon which requires fierce study and research. Traditional and indigenous life and its properties are annihilating to tremendously changing world of today. Historically the concept of patents is based on legal and social justification. The legal justification is that inventor should have exclusive rights over his invention as a reward and the social justification is that not to grant monopoly right, because they are privileges granted by the government to encourage research and inventions thereby providing new avenues for the economic growth and development.

The primary object of the intellectual property laws is to safeguard intellectual creations which are either in written form or expressed in some form or other and to define their boundary areas in the interest of society. It is an established fact that every law has some public oriented goals and intellectual property law is no exception to this established rule. It has some objectives to achieve for the promotion of intellectual, cultural, political and economic expectations.

The WTO is a potentially and very useful trade regulating body. Unlike other many international organizations, it allocates one vote for each country with no discrimination based on wealth or population. This could be very beneficial for developing countries, but unfortunately the developed countries are in much bath bargaining position. TRIPS treaty was created by WTO in 1995. Most of the members of the WTO had previously banned patents of biological resources, but TRIPS makes it mandatory to allow some of these patents. Although biopiracy has been an old issue. TRIPS has drastically increased its prevalence and the patentability of life forms and genetic material. There are number of economic concerns associated with biopiracy and TRIPS in developing countries.

The debate over whether TRIPS will boost or blight is a complex one.
Advocates of TRIPS assert that agreement could provide benefits of GMO's and other fruits of life patents that could drastically improve living standards in the poor countries of the world through increased agriculture productivity. Opponents of TRIPS argue that stealing T.K, patenting it, and selling it back to its creators will do nothing to improve the lives of the world’s poor. No doubt T.K is effectively stolen and used to benefit corporation rather than locals. Martin Khor of the Third world network calls this, reverse transfer of technology, where the poor developing countries are transferring knowledge and thus technology to the rich developed countries.

There are number of international conventions and treaties towards the protection of originality and novelty. For instance WTO regime, Agreement on Trade Related Aspect of Intellectual Property Rights, Berne Convention, Doha convention and guidelines issued by united nations have had great impact on development and protection of intellectual property worldwide.

Ideas and knowledge are ever increasingly becoming important in this fast changing techno-advance world whereby knowledge and creativity have become a part and parcel of trade. Intellectual property has not left any field untouched like medicine, films, books, computer software and music recordings. The best known and arguably economically, the most valuable form of protections of rights by the law of intellectual property come in the form of the patent. A patent is in essence, the grant of a monopoly is not absolute; patents are only granted for a limited period and are accompanied by public discloses enabling others in the field to consider and perhaps subsequently improve on it.

Traditional knowledge is a valuable heritage of the communities and culture that develop and maintain it and are also important for other societies and the world as a whole. Infact the importance of traditional knowledge has only been recently acknowledged by other disciplines and sectors of society and is now considered as a subject of protection under intellectual property law.
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regime. It is essential to preserve the benefits of knowledge for the mankind. Because it culturally, socially and economically valuable.

Traditional knowledge plays an important lead role towards the new developments and manufacturing sector and the products launched in the developed countries. Since the complexities associated with traditional knowledge require that steps be taken for the protection of this valuable asset both at the national and international level. As a result of this a number of countries are taken required steps for the protection of traditional knowledge from theft and consequent misuse.

Patents in India have their origin by the 1856 Act. After independence, relative inaccessibility and affordability, or even non availability of essential life saving medicines led to the government to appoint two committees: the Tek Chand Patents Enquiry committee (1948-50) and the Ayyangar Committee (1959). Consequent to the recommendations of these committees the Indian Patents law was enacted in 1970. The Indian Patent Act, 1970 was also enacted with a view to make patents serve the needs of economy as well as to make them a vehicle of rapid growth.

Traditional knowledge is a valuable heritage of the communities and cultures that develop and maintain it, as well as for other societies and the world as a whole. Traditional knowledge importance recently has been acknowledged by other disciplines and sectors of society and it is now considered a subject of protection under intellectual property law. It is essential to preserve the benefits of traditional knowledge for the mankind because it is culturally, socially and economically valuable. Traditional knowledge is an important lead to the developed countries for their new developments and manufacture of new products. There is a need for steps to be taken and worked for its protection at national and international levels. All member countries of WTO are trying to fulfill the minimum requirements of TRIPS and also trying to cover the traditional knowledge within the ambit of intellectual property law.
Defensive as well as positive protections have been taken by the countries. Though efforts have been done to protect traditional knowledge through various aspects of intellectual property laws, but still there is requirement to enact the stringent law for the protection of traditional knowledge. The *sui-generis* system is considered to be the only course left after the experience of *sui-generis* PVPFR Act, 2001. It has to be concerned both at the national and international level. In India profit of Traditional knowledge Digital library has been accomplished and has been made available to EPO for consultation from 2009. At international level different organization like WIPO, WHO, WTO, UNESCO, UNCTADE are also at work for the protection of traditional knowledge within the ambit of their international from work. WIPO has received legislations as to traditional knowledge from many countries. These legislations are useful for us in formulating legislative and administrative strategy for protected traditional knowledge.

The enactment of the Patents Act, 1970 has proven a boon for Indian pharmaceutical industry (especially the generic pharma segment). The traditional medicine continues to play an important role in health care but the general lack of research on safety and efficacy of traditional medicines is of great concern. Fortunately in many developing countries, traditional medicine offers a major and accessible source of health care. India has also focused on the role of traditional medicine in national health care strategies, supporting the development of clinical research into the safety and efficacy of traditional medicine, advocating the rational use of traditional medicine. Indian Pharmaceutical Industry also has a significant contribution of Indian System of Traditional Medicine. The newly enforced product patent regime would be in favour of the traditional medicinal knowledge of India. Taking the product patent on traditional herbal drug will certainly work to prevent misappropriation of traditional herbal drugs and its knowledge by the western countries.
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The Patents Act, 1970 abolished product patents for food, pharmaceuticals and chemicals and restricted the grant of patents in these fields only to process patents. The term of patent was restricted to 7 years in these process patents against 14 years for others, in general fields. The compulsory licence exemptions were reinforced by the introduction of the licence of right provision. This Patents Act, 1970 provided an impetus for the growth of the generic pharmaceutical industry in India. During 25 years, from 1970-1995, the share of the national sector of the pharmaceutical industry recorded a growth from 15% to nearly 18% or near about. During this period, India became net exporter of pharmaceuticals occupying the 3rd largest in terms of values.

Through the three amendments to the Patents Act, 1970 India has made the patent laws, TRIPS compliant with the third patent amendment the was introduced, with the omission of section 5 of the Patent Act dealing with compulsory licensing of pharmaceuticals for export purpose. It is considered as response to a response to India’s international commitments. Many lacunas have been pointed out in the provisions of compulsory licence such as the three years period after the grant of patent. This period might create havoc where deceases spread in epidemic proportions, the grant of patent would be a monopoly, the other point to be considered is that if the emergency situation arises within a period of 3 years, companies may take advantage and may challenge any application for the grant of compulsory licence. The drugs present in the provisions of the Act. These companies export their drugs into India rather than applying for patents for those drugs in India.

The Indian pharmaceutical industry which had commerce export of bulk drugs and formulations to least developed countries in late 70s and 80s has now emerged as a major global player. Fulfilling its commitment to be TRIPS compliant adoption of non-infringing processes for filing DMF (Drug Master File and ANDAs Abbreviated Drug Applications) have greatly helped the Indian pharmaceutical industry to achieve greater height of market penetration
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and technological progress.

In the new product patent regime it was assumed that the availability of drugs will be affected, but Doha Declaration is one of the significant achievements of the efforts of the developing and the least developed countries to gain access to the patented medicines. Particularly it facilitates use of the patent right of the innovation without authorization of the patent holders for public uses. Paragraph 6 of the declaration and the waiver introduced enable now the countries to utilize the compulsory licence not only for the domestic purposes but also for export purposes which would help those countries without pharmaceutical production capacities. This provision nullifies the concern among the least developed countries and health activists, created by major generic producers such as India Adhering to the TRIPS Agreement. The domestic patent amendment Act in India also facilitates production of patented drugs and thereby access to medicines to a large extent both within and outside the country. It seems the movement utilizing the CL as facilitated by the Doha Declaration gains more momentum and the role of drug cartels could be reduced with more contribution by generic producers such as in our country.

In the new product regime challenges before Indian Pharmaceutical Industry is to start spending and investing in research & development (R&D). During the process patent regime research & development investment was almost nil, though industry was in its bloom through the process of reverse engineering, but now the capacity of Indian pharmaceutical manufacturers has been on rise. The detailed study in the chapter indicate that the larger companies have initiated activities to increase investment in research and development (R & D) applications for process and product patents. On the other hand, efforts in small or medium scale units have been directed at improving the quality of production to meet the international standards and competition in the generic sector as well as to improve the export prospects. Indian companies can also exploit the lower costs of drug discovery R & D in
India to their advantage and invite foreign companies for collaborative research, the incentive India offers to MNC’S in terms of cost effective, skilled R & D manpower and facilities for clinical research might lead to several global companies shifting their R & D activities to India or manufacturing and research activities to India. In post TRIPS scenario the pharmaceutical MNC’S are geared for mergers and acquisitions to create large corporate structures to tackle skill requirements and to use already existing market network and established brand equity. This will lead to economic development and rapid increase in the technological capabilities of Indian firms.

It is inevitable that the industry now has to face challenges and the opportunities that have been placed by the product patent regime. The main point of concern was to the affordability and availability of drugs for India drug is not a matter of trade but concern with life and death of the people attracted by severe disease like HIV-AIDS, cancer, epilepsy, and tuberculosis. It was doubted that price of life saving drugs would shoot-up and would become out of the reach of millions of people in developing counties. According to official estimates, nearly one fourth of the people are living below poverty line. The reasons given for the inaccessibility and unaffordability is that the flood of patent applications would result in high cost economy and sufferings for the ailing people by the poor quality of patent. But this reason does not seem to be a solid reason. Going thru a detailed in depth study reaches to the conclusion that at least for few years, cost of majority of the drugs for common, almost are not expected to rise. Of course some drug makers have to pay royalty to the MNCs but these payments are negotiable. The central Government has power to scrap patents or at least ask multinational pharma companies to sell their products at reasonable prices. Because of the rise of R & D investment in the product regime results in the production of quality drugs which would be easily available to the public. India’s main advantage of low cost production of generic drugs will certainly help in the accessibility of all drugs to the reach of a common man.
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It is also expected that the patient shall soon assume the role of a consumer in the pharmaceutical market and price of medicine is expected to be lower due to development and expanding of alternative system of medicine in the traditional knowledge regime which is going to be emerged as an important competitor to the existing pharmaceutical market. This chapter mentions the contribution of Indian traditional system of medicine and also analyzed the overall performance of Indian pharmaceutical industry.

United States in early 1930's has opted the Patent Act for the protection of plants, and now it has three acts for the protection of plants but India being a member of WTO also realized the need to protect the interests of plant breeders, farmers and promote conservation of genetic resources and seed industry. Though the enacted law is primarily based on UPOV Convention 1961 and which can be consider a grundnorm for the protection of plant varieties but the Indian law also includes a number of provisions which were not present in UPOV Convention. The Protection of Plant Varieties and Farmers’ Rights Act, 2001 not only protects the breeder’s right but also recognizes the farmers’ rights. TRIPS is an international agreement that requires member countries to provide strong intellectual property protection in their domestic law. Article 27.3(b) of the TRIPS agreement provides that member states may exclude essentially biological processes for the protection of plants or animals other than non-biological and variety protection, Article 27.3(b) gives Member countries an option to protect plant varieties by patents or an effective sui-generis system or both, Though the TRIPS agreement mandates the member states to give effective protection to plant breeder’s right, even then Indian law gives recognition to the farmers’ right. Indian legislation is the first in the world, which grants formal rights to farmers. The Indian plants varieties law recognizes the role of farmers as cultivators and conservers and the contribution of traditional rural and tribal communities in the country’s agro biodiversity by making provision for benefit sharing and compensation and also protecting the traditional rights of farmers. The traditional rights
include rights to use, save, share or sell his form produce of variety under this Act but the condition attached to it, that the sale is not for the purpose of reproduction under a commercial marketing arrangement. Even then by giving the farmers their traditional rights is equal to the recognition of their role in the growth of agriculture as well as in the economy of the country. Indian breeders, mainly working in the public research system have deluded a large number of new varieties. In the absence of plant breeder’s rights these varieties would be freely available to others for exploitation. So by putting a system of plant breeder’s rights in action through law in India would provide protection to the public research system and varieties developed by them. In future researcher’s access to foreign germplasm may get linked to the provisions of the plant breeder’s right. This is also a fact that in the absence of plant breeder’s rights foreign companies would be hesitant to organize buy back production of seeds in India for export to their countries for fear of unauthorized use of their genetic material.

The Protection of Plant Varieties Farmers’Rights Act, 2001 tries to strike a balance between the monopoly rights granted to the intellectual property rights holders and the benefits of society through the provisions of compulsory licensing, researcher’s rights, exclusion of certain varieties from registration etc. Though certain loopholes are also present in the Act such as to avail the monopoly right registration of the variety is necessary and for retaining registration they have to pay royalty to the Government on the other hand it can also be consider as a check on the breeder’s monopoly right. In the absence of this provision, obligation relating to benefit sharing and payment of compensation will not be workable by amending the provisions of the Act these loopholes can be closed. By enactment of PPVFR Act, 2001 legislators tried to maintain the equilibrium between the Indian dual goals of protection of agrarian economy and protection of private investment in the development of new plant varieties and also recognizing the protecting the rights of plant breeders and farmers.
CBD affirms the sovereign rights of the states over their biological resources and India being a member of CBD decided to bring a piece of legislation in the form of Biological Diversity Act, 2002. The Biodiversity Act also plays an important role in the conservation of biodiversity protection of traditional knowledge, equitable sharing of benefits and to regulate access to biological resources. Section 3, 4, 6 and 7 the key provisions relating to regulate access to biological resources and traditional knowledge and exemption to certain persons such growers and cultivator, Vaidis & Hakims make a good combination of access and denial at some extent it is being able to present biopiracy. Since it is an innovative legislation with adequate measures to safeguard biodiversity and protection of economic interest of local and traditional comminutes, it will work as a tool for protection of traditional knowledge after the averseness of different state holders and its effective implementation.

It is now an established fact that TK plays an important role in the global economy and is valuable not only to those who depend on it in their daily lives but also to modern industry and agriculture. Most of the traditional societies depend on this knowledge for their food and healthcare needs. Consequently, bio-prospecting has become a mega billion dollar global industry and biotech firms are engaged in building cross-border value chains on an unprecedented scale in a bid to discover and develop new active ingredients from traditional medicine. This has not only created strong incentives for bio-informatics and bio-prospecting, but also for bio-piracy.

Rampant bio-piracy deprives the holders of TK of any benefits. Loss of biodiversity and associated TK will not only deprive the world of a unique knowledge-base but also threaten the very survival of local communities. IPR laws must, therefore, benefit all holders of such IPRs equally whether they are huge multinationals, spending billions of dollars on research or traditional local communities where knowledge has simply been passed on to one
generation to other. Communities and countries that are rich in bio-diversity and
to knowl edge of traditional medicine may gain if they are able to share in trade and
vestment benefits provided their knowledge is used with 'prior informed
consent' and they participate in the design of benefit streams from trade and
vestment that arise from the global development of the healthcare industry.

However, the traditional knowledge does not lend itself easily to
concepts of property in any form of known Intellectual Property Rights. To hail
it as a sui-generis is inadequate without a system of use rights and obligations
that can be created and operated at least at a national level. It is doubtful that an
international sui-generis system can be instituted without first constructing
national sui-generis systems although it would be useful that international
guidelines be agreed upon so that at some stage the national systems created
maybe harmonized.

India and many other countries have introduced sui-generis system to
protect their plant varsities. There is a need to include other issues in these sui-
gen eris system that go beyond the framework of the TRIPS agreement. For
instance, the concept of Farmer's Rights emphasizes the need to maintain
ge netic diversity in the farmer's fields.

The other pertinent question would be as to who are entitled to seek
protection of which forms of traditional knowledge and who may confer
recognition and status on the holders of traditional knowledge in a sui-generis
modality raises a number of questions about the role of communities and
functions of communally held knowledge in traditions that are part of heritage
and culture as well as living traditions of habitat presentation and human
interactions. At last to conclude it can be said that for the protection if traditional
Indian knowledge, a separate sui generis system is required. Traditional
knowledge is not an area of patent. Patent requires novelty essential elements of
patentability which cannot be fulfill by traditional knowledge. The new patent
regime does not directly affect the traditional knowledge. If the patent regime
affect it would be at the extent of the aspect of traditional medicines. On one hand where for the protection of plant varieties a separate sui-generis law has been framed which was also not an area of patent on other hand the need of an hour is to frame a sui-generis law for the protection of traditional Indian knowledge.

On the basis of above study it can be said that what has been hypothesized by the researcher has been proved correct. India being a signatory of WTO TRIPS agreement has make its provisions in compliance to the agreement. In case of traditional knowledge TRIPS agreement does not specifically talks about its protection though other legislations have tried to protect the country’s rich heritage at some extent even then there is an urgent need of a sui-generis legislation which can protect our long back cultural heritage.

The discussion carried out in five chapters of this research work has made it crystal clear that a lot of steps have been taken by the international community for the protection of valuable asset in the form of traditional knowledge yet there are certain gaps which need to be filled so as to make protection of traditional knowledge regime effective. It is necessary for the effective and integrated implementation of the three Acts, Protection of Plant Varieties and Farmers’ Rights Act, 2001, Biodiversity Act, 2002 and Seeds Bill 2004, to protect the T.K. In India a National patent programme should be started to make masses aware of its benefits challenges and be ready to face global new patent regime. Patent literacy is a must for India. The following important suggestion may be advanced for taking certain initiatives for the protection traditional knowledge.

SUGGESTIONS

No doubt, protection of T.K is a global problem demand globalssolution. This T.K should be respected in all patent laws. Since T.K is often owned by an entire community, the entire community should have some share in the patent rights. This is one of the surest ways to fight biopiracy. This is also proposed that traditional communities should be integrated mainstream of
the country origin. It is submitted that the TRIPS trade treaty needs to be revised to protect traditional knowledge and prevent bio-piracy. Further the TRIPS and CBD treaties should made workable to altercate contradictions and inconsistencies in the two agreements.

Public awareness campaign should be lunched by the government as there is an urgent need to educate the T.K holders, and communities. The effect of product patent would be more profound on pharmaceuticals but India should set up a new agenda as new challenges are a head. It is well recognized fact that there exist basic human rights to a clean and safe natural environment. The effects of Bio-piracy and industrial agriculture also clearly threaten. These human rights surveying the existing material on protection of T.K researcher reached on the conclusion that the jobs, livelihood, employment, food security and safety, equity, the precautionary principle should not be ignored for IP regime in biodiversity.

1. In India, in order to check bio-piracy an exercise has been initiated to prepare easily navigable computerized database of documented TK relating to use of medicinal and other plants, known as Traditional Knowledge Digital Library (TKDL). However, documentation of TK is only one of the means of giving recognition to knowledge holders. Mere documentation may not enable sharing of benefits out of the use of such knowledge unless it is backed by some kind of mechanism for protecting knowledge. Documentation of TK may only serve a defensive purpose, namely that of preventing the patenting of this knowledge in the form of which it exists.

2. The Bio-Diversity Act, 2002, which regulates access to genetic resources and associated knowledge, contains no provision for the involvement of communities in decision-making. The Act is very much influenced by Bonn Guidelines. The National Bio-Diversity Authority (NBA) is the principal body for granting access to genetic resources.
Thus, there is a need to include more stakeholders from amongst the traditional communities so that its representative nature may be improved.

3. National level mechanisms and legal provisions to prevent bio-piracy as well as to install informed consent mechanisms to ensure reward to TK holders should also be given international recognition for their effective implementation and for their enforcement in other countries. Thus, there is a need for development of an international mechanism for protecting TK.

4. Considering the fact that TK also needs international protection, it is imperative to define the characteristics of the international mechanism, which must include the following:

(a) Local protection of the rights of the TK holders through national *sui generis* regimes including customary laws.

(b) There is an urgent need for the effective enforcement of municipal level *sui generis* regimes through positive comity of protection of TK which include co-ordination and co-operation amongst national authorities of various countries in undertaking measures for protection of TK.

(c) A procedure whereby the use of TK from one country is allowed particularly for seeking IPR protection, or commercialization, only after such use is disclosed and PIC is obtained from the competent national authority of the country of origin.

5. That patent must not be granted without prior consent of the country, origin should be incorporated. No patenting plants should be carried out without prior informed consent of government and communities holders in country origin.

6. Prior informed consent for the use of TK is necessary whether the use of
TK is commercial or non-commercial. The right to TK should be treated as basic Human Rights.

7. Since development of an appropriate form of protection for the knowledge of local communities is of great importance, therefore, there is a need for various bio-diversity rich developing countries to work together inter-governmental expedition towards developing an international instrument for the recognition of diverse national *sui generis* system. Thus, various bio-diversity rich countries should take steps for the preservation and protection of TK, and should come together for making concerted efforts in order to obtain international recognition of their national level systems of protection of TK.

8. There is a long felt need to harmonize the provision of TRIPS and CBD. The CBD while reaffirming the sovereign rights of nations over their biological resources, calls for equitable sharing of benefits arising out of the utilization of these resources and associated TK TRIPS agreement, on the other hand, recognizes IPR to be private rights and provides for rewarding inventions without referring to the source of biological material and associated TK and without commitment for fair and equitable sharing of benefits with the country of origin of such knowledge. The adverse implications of the TRIPS Agreement on protection and sustainable use of TK needs to be rectified. The TRIPS Agreement should be used not only to reward the inventors but also the local people and community who have conserved and developed the TK, which provide valuable base for such inventions. Therefore, the developing countries must utilize the mandate given by Doha Ministerial Declaration on the relationship between CBD and TRIPS, which needs to be harmonized,

9. An action may be taken on the following three broad fronts: -

(a) To put into place well considered legislations and
complimentary arrangements which would help address the needs of the holder of TK.

(b) To establish the institutional structure needed for effective implementation of the legislations; and

(c) To review various legislations enacted both by the Central Government and different State Governments, with a view to amend those that may undermine the rights of the traditional communities over the resources they have been using.

10. Institutional structures should be established to provide the traditional communities with an opportunity to partake of the benefits arising out of the biological diversity and/or associated knowledge. The need for an institutional structure arises from the fact that the use of contracts for the sharing of benefits suffers at least two limitations which need to be taken into consideration. In the first place, they are voluntary agreements between the parties concerned. Given their nature, contracts cannot be relied upon as a way of realizing the objectives of the CBD. The second and the more important limitation of contracts is that it would prevent fair and equitable sharing of benefits which may arise when the parties involved are of vastly unequal bargaining strengths, as usually large companies having significant market power and the traditional communities, are at the fringe of the market system.

11. If bio-piracy has to stop, then the U.S. patent laws must change, and Article 102 must be redrafted to recognise prior art of other countries. This is especially important given that the U.S. patent laws have been globalizing through the TRIPS agreement of the WTO. Article 102 lays down that "A person shall be entitled to a patent unless:

A. The invention was known or used by others in this country or patented or described in a publication in this or a foreign country before the
invention thereof by the applicant for patent: OR

B. The invention was patented or described in a trade publication in this or a foreign country or in public use or on sale in this country more than one year prior to the date of the application for patent in the United States."

Thus, use in a foreign country does not constitute 'prior art' in U.S. patent law. This is the basis of bio-piracy of traditional Indian knowledge systems, and indigenous uses of biological resources being patented. The U.S. style patent laws can only pirate indigenous knowledge. They cannot recognize or protect it.

The issue of providing legal protection on TK in line with the existing IPR regime is a complex one because of the very nature and clustered pattern of distribution of TK held within and between various communities across the world. Positive and defensive protection measures along with development of sui-generis laws may perhaps be the best and immediate options for countries like India to provide intellectual property rights to TK holders.

Thus, it can aptly be said that unless India, acquires the R&D along with industrial capabilities in order to use its knowledge base after giving due share to the custodians of these knowledge, the nation will not be in a position to take the advantage of the new patent system. This makes a strong case for a sui generis law in India to recognize and protect the interest of the custodians of TK. If the TRIPS Agreement is designed to promote industrial growth based on the western technological development, the sui-generis legislation must be one to protect and promote traditional knowledge for the revival and growth of the village industries in India for the economic prosperity of the down trodden lots of these villages. It is this legislative vacuum and the technological and industrial backwardness in India that are responsible for the transfer of the traditional knowledge to scientific community in the developed nations to reap the new fortunes without any obligations to the custodians of TK. This is in clear violation of the basic human rights-cultural, social and economic -of these
people. As India leapfrogs into this new century of knowledge based industry and growth, its growth and development may not be determined only by its strategies of generation of new knowledge and innovation but also by the protection and exploitation of existing traditional knowledge and intellectual property. Thus, in India there exists an urgent need to both protect and utilize the existing traditional knowledge.

To mitigate the problem of protecting traditional knowledge, the Government of India has taken steps to create a Traditional Knowledge Digital Library (TKDL) on traditional medicinal plants and systems, which will also lead to a Traditional Knowledge Resources Classification (TKRC). Though linking this to an internationally accepted International Patent Classification (IPC) System will mean building a bridge between the knowledge contained in an old Sanskrit Shloka and the computer screen of a patent examiner in Washington. Even then the traditional knowledge existing in this vast population of India needs more attention to protect not only the medicinal knowledge but every aspect of the traditional knowledge. Hopefully this will eliminate the problem of the grant of wrong patents since the examiner, all over the world will be aware of the Indian rights to that knowledge.

There is an urgent need for a timely legislation so that Traditional Knowledge in India may be protected without wasting any more time because delay can cause big national loss. The researcher therefore proposes the following model law to be adopted in our country.

1. The objectives of the model law should -

(a) Must be to promote respect for the protection preservation wider application and development of the traditional knowledge of the tribal, indigenous and local communities to promote the fair equitable distribution of the benefits derived from the use of that Traditional Knowledge.
(b) To promote the use of the knowledge for the benefit of the traditional knowledge holders.

(c) To ensure that the use of knowledge takes place with the prior informed consent of traditional knowledge holders.

(d) To protect and support the inalienable rights of local communities including farmers and breeders over their knowledge and technologies.

(e) To recognize and provide compensation for the knowledge practices and innovations of indigenous people and local communities in the conservation and sustainable use of ecological of the components of biodiversity.

(f) To ensure the effective participation of concerned communities in deciding on the distribution of benefits deriving from knowledge and technologies.

(g) To encourage national and grassroots scientific and technological capacity.

(h) To avoid situations where patents are granted for inventions made or developed on the basis of Traditional Knowledge of the holders.

2. The model law must include sciences, technologies and cultural manifestations. Genetic resources, seeds, traditional medicinal knowledge systems and practices, knowledge of the properties of fauna and flora, oral traditional visual and performing art such as yoga and skills and overall “Community Knowledge”, which can be considered as knowledge relating to conservation and sustainable use of biological resources and which is of socio-economic value, and which has been developed over the year in traditional on local communities.

3. Certain Conditions must be laid down for the Access to TK which are as under-

(a) The applicant shall provide a description of the innovation, practices,
knowledge or technology related to biological resource and proposes mechanism of benefit sharing.

(b) Local communities must have a right to refuse access to their TK where such access will be detrimental to the integrity of their national or cultural heritage.

(c) Authorization of access to associated TK must be subject to the prior consent and prior agreement of the owner

(d) A time period for the access to associated traditional knowledge must be framed along with a condition of renewable accusation period should be framed.

4. There should be certain conditions laid down for the protection of traditional knowledge which are as follows:

(a) Indigenous or local communities should be granted the rights on the condition that they created developed, held preserved or are in use of that knowledge

(b) The TK require that protection should not be publicly known outside the population or local community in which it has originated.

5. The scope of the model legislation should relate to the fact that the Owner of TK shall have the right to-

(a) Object to its direct or indirect reproduction imitation and /or use by unauthorized third parties for commercial purposes.

(b) Assign, transfer or license the rights in the traditional knowledge including transfer by succession.

(c) Refuse access to their TK where such access will be detrimental to the integrity of their natural or cultural heritage
(d) Farmers’ Rights include the right to the protection of farmer’s traditional knowledge relevant plant and animal genetic resources. Exceptions to such right.

(i) No legal barriers shall be placed on the traditional knowledge exchange system of the local communities in the exercise of their rights.

(ii) Legislation should not affect access, use, and exchange of knowledge and technologies by and between local communities.

6. A holder of traditional rights must be local and indigenous communities including traditional practitioners and traditional professional groups and as well as Farming community. It may be an artisan or craftsman.

7. The Rights may be acquired in the following manner:

a. There must be a system of registration of the knowledge (TK) which can protect the TK at district, state, and national level.

b. Being India a vast country comprising many tribal communities, registration can be done on the area-wise tribal communities’ knowledge.

c. This step can be taken at village level -

(a) Misappropriation, unauthorized use of TK and economic exploitation products or processes developed from TK without confirming the provisions of lawful access should be liable to be fined.

(b) Negligence in such cases need to be punishable.

(c) The civil remedies that are provided to include injunctions, damages, and accounts of profits. The model law must also provide for a maximum imprisonment of 3 years and a maximum fine of rupees two lakhs.

(8) Access and Benefit sharing and Prior Informed Consent.

a) Access to traditional knowledge for the purpose of research, scientific study, commercial use, biotechnological and industrial application shall apply for prior informed consent of the TK holders.
b) Fair allocation of the benefits resulting from such use by prior agreement with owner of TK.

c) Access permit should also be subject to payment and the state and the community shall be entitled to have a share in the earnings derived from any knowledge.

d) The State shall ensure that at least fifty percent of benefits derived shall be channeled to the concerned local community.

Violation of the proposed provisions should be penalized. It may be imposed in terms of fine or through penal sanctions against the violators.

For the suggestions to be meaningful it has to be implemented to serve the interests of different groups. The government should do a great service by amending or enacting a new and appropriate legislation on the lines suggested by the researcher. It is submitted that the universities, Bio-technological institutions lawyers, and academicians can debate over the suggested action plan and remedies and help in benefiting the community and T.K. holders.

Lastly our submission is that India needs to protect the Traditional Knowledge by enacting suitable legislation on the line of African Model or it must be *sui-generic* in character as Traditional Knowledge has different characters