

Tangible and Intangible cultural heritage and Intellectual Property Rights-Prospects and challenges

Key terms: Intellectual Property Right (IPR), Traditional Knowledge (TK), Traditional Cultural Expressions (TCEs), Biodiversity, Biological Resources, Genetic Resources, Geographical Indication (GI), Indigenous.

Abstract: Intellectual Property Rights are the driving force of economic growth. It promotes innovation and creativity by rewarding monopoly rights to the innovator. IPR is a product of mind and intellect in the form of skill, know-how, technology, artistic works etc. Traditional knowledge (TK) refers to all those knowledge systems, know-how, skill, practices, information etc. which originates in a traditional context and having inter-generational characteristics and contains both tangible and intangible cultural heritage commonly known as traditional cultural expressions (TCEs). TCEs is a subset of a broader umbrella term “traditional knowledge”. The traditional approach of IPR and legal measures provided under it is by and large inadequate in providing holistic protection to the TK and TCEs held by tribal or indigenous community. Despite the given limitations, a new jurisprudence of traditional cultural IP rights can be evolved by extending the existing IP laws to include cultural heritage within the relevant IP field and help the local communities in protecting and preserving its cultural heritage. Interface between IPR and TK or TCEs creates certain paradox and challenges which need a new policy direction and orientation.

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1. Introduction

Arunachal Pradesh is situated on the eastern most corner of India having international borders with Bhutan, China and Burma. It is the largest state among all the north eastern states, namely Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim. Its total geographical area is 83743 sq. km with the population density just over 17. Total population of the state, according to the Census of India 2011 is 1, 382,611, among which the tribal population is about 64 percent. The size of rural population is 10, 69,165 while the urban population is 3, 13, 446 which is 77.33 percent and 22.67 percent respectively.² Arunachal Pradesh is considered to be luxuriant in biodiversity and has been recognized as the 25th biodiversity hotspot in the world (Chowdhury, 1999). It is spreading over an area of 83,743 sq. km with a variation in altitude from 150- 6,500 m and unique climatic conditions. The original inhabitants of Arunachal Pradesh belong to 26 major tribes and 110 sub-tribes (Srivastava, 2009).³ Arunachal Pradesh has

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² <http://vojana.gov.in/agriculture-in-arunachal-pradesh.asp> last accessed on 9 October 2017.

³ Bora, Sudipta Sankar., Lahan *et al* (2013). Agro - ecological management of natural resource management of the Galo tribe of Arunachal Pradesh, India. Asian J. Environ. Sci., 8 (1): 36- 40.

been identified as one of the “*Biodiversity Hotspot*” areas in the world. The tribes inhabiting the State recognize over 500 species of plants as having medicinal properties (S. Hussain & D.K. Hore, 2008).

The objective of this paper is to locate Intellectual Property in rich traditions and culture and knowledge of indigenous community in varied fields in order to evolve a new jurisprudence of IPR in the context of traditional holders of right. A situation which materially differs from conventional IPR regime in which individual right holder is the core whereas in traditional indigenous context, community becomes the core. The question is how can IPR be used to resolve this paradox? Can we fine tune IP laws to accommodate traditional intellectual property right in existence in the form of common collective rights with traditional community ethos and systems? The focus of this paper will be on creation of collective IP rights which is sustainable and using intellectual property in safeguarding of traditional cultures as well as providing economic security.

2. Rational

*"Indigenous peoples have the right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as the manifestations of their sciences, technologies and cultures, including human and genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs, sports and traditional games and visual and performing arts. They also have the right to maintain, control, protect and develop their intellectual property over such cultural heritage, traditional knowledge, and traditional cultural expressions."*⁴

The linkage of IPR in the indigenous context can be examined from the standpoint of traditional cultural knowledge systems both tangible and intangible cultural heritage⁵ in diverse areas of agriculture, biodiversity, cultural expressions or folklores, resource management, food habits and other manifestations of their cultural expressions. IPR is essentially a product of modern scientific developments to reward the innovators or creators for any novel inventions. Hence, the traditional cultural property does not squarely fit in to it automatically. The later originates within the community in a traditional context and held collectively even though it evolves with change of time but its collective or common element remain static. One may ask what is the link between the IPR and culture of an indigenous tribe. Or does it embody any IPR at all? The

⁴ United Nation Declaration on the Rights of Indigenous People, Article 31.1.

⁵ Article 2 of UNESCO's Convention for the safeguarding of intangible cultural heritage: Intangible Cultural Heritage means the practices, representations, expressions, knowledge, and skills – as well as the instruments, objects, artifacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage. This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity. For the purposes of this Convention, consideration will be given solely to such intangible cultural heritage as is compatible with existing international human rights instruments, as well as with the requirements of mutual respect among communities, groups and individuals, and of sustainable development.

answer to this is yes. Just because IPR is not tailor made to protect community rights and interest in particular it does not mean that the community's inherent intellectual property over their cultural heritage or properties is to be ignored.

Tribes of Arunachal have rich traditional knowledge and cultural practices since times immemorial. Their socio-cultural life is closely associated with nature and its biological organisms. The mutual relationship of tribal people and nature is bounded by religious beliefs, cultural practices shaped by sustenance factors. Even after the apparent changes brought in by the modern developments in these tribal society, the traditional beliefs and practices are still held important.

3. Traditional knowledge of Indigenous Tribes

Arunachal Pradesh has rural base of economy as over seventy percent of population still live in about 3863 villages. Statistical Abstract of Arunachal Pradesh, 2008, shows that about 58.44 percent of population belongs to the category of cultivators. Their main occupations are agriculture and animal husbandry. Tribal communities of the state follow both the shifting cultivation and sedentary agriculture. Jhum cultivation or shifting cultivation or slash and burn method of cultivation was the earliest form of agriculture and it is still practiced in a vast area. This has been a common practice in all the hilly parts of North East and other parts of the world.⁶ In agriculture, the Apatani tribes of Ziro is well known for their traditional paddy cum fishing cultivation. It is a highly evolved indigenous system of farming which is unique in cultivation of both rice and fish together. The cause behind this highly evolved system is the limited resources available to them. So they have to develop a system through which they can utilise their limited resources perfectly. For maximum utilization of their land they cultivate both fish and rice in the same field. For this field preparation starts after harvesting and continues till the end of the spring. Weeding is done three to five times and the weeds are dumped in the field to decompose. They prepare the field by dumping household wastes, chicken and pig excreta, crop residue, cow dung etc. Inorganic fertilizers are not used. They burn the rice stubbles that are left in the field after harvesting. Vermicomposting is also used by some farmers.⁷ Rice varieties are Mipya which is harvested in the month of July and Empo which is harvested in October. Both of these are 'folk variety'.⁸ 'Common Carp' is the main fish variety used in this along with the naturally available fish varieties. Fishes also eat harmful insects like water beetle, grasshopper and others. 'Lemna minor' and 'azolla' are also eaten by fishes that originate in the root portion which fixes N₂ in the field. In turn the waste material of fishes acts as manure to the plant.⁹This is an

⁶ *Supra* note 1.

⁷ Angkita Sarma and D. C. Goswami Sustainable agricultural practices and the methods of traditional water harvesting in North East Region of India ,Arch. Appl. Sci. Res., 2015, 7 (4):23-30.

⁸ "folk variety" means a cultivated variety of plant that was developed, grown and exchanged informally among farmers (Section 41 (b) of BDA, 2002).

⁹ *Ibid.*

extraordinary method of sustainable agriculture practiced by the hardworking Apatani tribe who believe in optimum utilization of their limited land resources.

The tribe is unique in having traditional rights over land, water and forests within their jurisdiction and exercises control over the natural resources within their surroundings. There are no written land records of ownerships in the area. However, traditional boundary demarcation of land lines between the villages and clans are maintained through natural features of streams, hills and other land marks which is honored by everyone. The land is owned by clan, village or a family normally. The tribe takes special interest in conserving natural flora and undertakes special conservation and afforestation programmes for the maintenance of natural vegetation. Galo tribe don't cut big trees believing that the 'yapom' i.e. evil spirit reside there and it will be enraged and misfortune will fall upon them. This belief results in conservation of large dense forests.

Galo people which is one of the major tribes of Arunachal practice two types of agriculture i.e. shifting agriculture/jhum agriculture (Modii/Adi-Riike) and terrace/wet agriculture (Isii-Riike). The farmers are preserving the ecological pest and diseases control measure knowledge over the generations. For example, Citrus grandis (Pummelo) leaves used as insecticidal and repellent for the control of the rice pest *Leptocorisa oratorius*. House hold ash is used as a repellent to control pests and diseases of the cultivated crops. A number of traditional traps are used for control of rats in the rice fields. After harvest of rice crop, grains are stored in well protected Indigenous Granary, which inhibits any pest and diseases of stored grains.¹⁰

Poka, a traditional rice wine plays an important role in the socio cultural life of the Galo tribe of Arunachal Pradesh. Poka is consumed during most of the festive occasions and celebrations. The starter culture (locally known as opop) is concocted by women folk with rice flour and several herbs. Some of the indigenous life supporting plants of the tribe are; Bamboo¹¹ which is widely used as food, in building house, rituals, cooking device, fencing, utensils, ornamentation, furniture etc.

The Khamti tribe of Lohit District of Arunachal Pradesh have a very rich ethnobotanical medicinal knowledge many of which are said to be recorded in their Buddhist literature. There have been many research study carried out on their traditional knowledge of medicine. The botanist have identified and documented hundreds of plant species and its medicinal properties based on their traditional knowledge. It is reported that khampti herbal practitioners cure malaria, fever, bone fracture, anemia, snakebite, cancer, reproductive health, rabies, tuberculosis, diabetes, jaundice etc. The science of orthopedics is highly developed as the bone healers heal the patient within one week. Their medicinal preparation techniques are mostly accompanied with the enchanting of mantra.¹² They have a combination of both herbal and folk healing, a unique method of treatment often found in all tribes. Seventy percent of herbal practitioners are from older generation and belongs to lower income group in the village (Das & Tag).

¹⁰ *Supra* note 2.

¹¹ *Bambusa Indica* Arundinacea (Retz.) poaceae.

¹² Ak Das & Hui Tag, Ethno medicinal studies of the Khamti tribe of Arunachal Pradesh, Indian Journal of Traditional Knowledge, Vol.5 (3), July 2006, pp. 317-322.

The Monpa tribe of West Kameng District have traditionally been using *Daphne papyracea* for preparing hand-made paper for painting and writing religious scripts in Buddhist monasteries. Two plant species *illicium griffithii* and *Rubia cordifolia* are commonly used for traditional dyeing of clothes and food items. The underground tuber of *Aconitum ferrox* is widely used in arrow poisoning to kill ferocious animals (Nima D Namsa *et al*). In Arunachal, about 5000 species of angiosperms has been recorded and over 500 species of plants are used in the traditional healthcare system to treat various ailments (Deb S *et al*). The Monpas are well known for medicinal knowledge, wood curving, painting religious scrolls called Thankas, carpet, paper making and weaving. The Monpas are agriculturist, practice both shifting and permanent types of cultivation. The medicinal knowledge of Monpas are held by the families and transfer of knowledge to people outside the family circle took place on substantial payment and knowledge is formally transferred along the family line and mainly through sons (Nima D Namsa *et al*). Monpas are said to have very good knowledge of ethno-veterinary plants also.

Tangsa and Singpho tribes also use plants and its part for diseases and sickness. *Catharanthus roseus (L) G.Don*, is highly used as anticancer drug yielding plant in the region. They have a local remedy for diabetes also. The plant species of *Solanaceae* and *Lamiaceae* are widely used as medicinal plants by the people of Arunachal Pradesh.¹³ Many of these medicinal plants are also taken as a food by the tribes such as *marsha* or *marshang (spilanthus acmella merr)* its flowers are chewed during toothache by the Nyishi tribe and eaten as vegetable by Galo, Adi, Nyishi etc. The fact that medicinal plants are used for the same purpose by more than one community might indicate their pharmacological effectiveness. This has been the finding of several ethnobotanical studies carried out. The majority of the informants reported in research survey that they keep their medicinal plant knowledge secret and that transfer of the knowledge has mainly been taking place vertically from father/mother to child mainly a son. Herbal medicines has become integral component of traditional healthcare system among the tribal communities of Arunachal Pradesh.¹⁴ Some of the medicinal plants like *Mishmi Teeta* are endemic to this State. The tribal communities of the State draw their sustenance largely from the forests. The ethnobotanical information obtained from the tribal community serves as a base for new compounds with active principles for phytochemical, pharmacognostical, pharmacological and clinical research (S. Hussain & D.K. Hore, 2008).

Traditional folk healing by Nyibo (priest) by chanting hymns to pacify ui (evil spirit) for curing several ailments is an integral part of Galo, Adi, Nyishi and Apatani tribes.

4. What is meant by cultural IP rights?

The tribes of Arunachal Pradesh which comprise of 26 major tribes and more than 100 sub-tribes have strong traditional village councils and very effective community bodies or organizations led by powerful and influential tribes who administer the community related social matters. Clan and kinship is a very integral part of their society. Natural resources and land rights are governed

¹³ Khongsai et al, Ethno medicinal plants used by different tribes of Arunachal Pradesh, Indian Journal of Traditional Knowledge, Vol.10 (3), July 2011, pp.541-546.

¹⁴ Nungki Perme *et al*, Medicinal Plants in Traditional Use at Arunachal Pradesh, India, International Journal of Phytopharmacy, Vol.5(5), pp.86-98, ISSN:2277-2928.

under the customary laws of each tribe. Community resources like forest, rivers, and animals are used or exploited as per the customary norms recognized or framed by the community. Preservation or conservation of natural resources are largely the concerns of the community under whose jurisdiction it falls. Idea of shared resources and labor intensive work is widely prevalent even today in agriculture and other community occupations. A very strict village made regulations on cleanliness, use of common property, order and security is adhered to by the village folks. As discussed above the tribes have rich traditional knowledge on agriculture, resource management, plant medicinal knowledge, folk art, music, dances, food processes , weaving, crafts making and other cultural manifestations which are essentially community based and regarded as the community's property in modern parlance community's intellectual property. They have own unique customary laws and community rules which govern its access, use and benefits. The rights and liabilities are determined as per the customary norms of equity and fairness. The cultural IP rights is inherently recognized under the customary laws of the tribes.

In these backdrop, the author would like to examine the existing IP laws in an attempt to highlight how traditional knowledge resources repositories could be sustainably used, preserved and commercially exploited and bring economic empowerment to the knowledge holders at the same time. My contention is that as the IP laws are designed mainly for the industrially developed society, hence it is very difficult to seek its benefits to traditional community whose IP relevant knowledge resources are held in common pool in a collective sense. Nevertheless, there are ways and means which the author strongly feels adequate enough to support the community IP knowledge and valuable resources.

5. The Geographical Indications of Goods (Registration and Protection) Act, 1999

Geographical indication as the name suggest is a mark or a name indicative of the geographical origin or source of the goods. It is also indicative of particular quality and reputation attached with the product which are primarily attributable to the geographical factors of the region, territory, State or Country. GI registration can be applied for any agricultural, natural or manufactured goods as originating or manufactured from a particular geographical region or locality.¹⁵

This branch of IPR is best suited to protect the tangible traditional cultural intellectual property rights of the tribal communities. The community can form any association or organization of persons or producers of the concerned goods to apply for GI registration. Any government authority can also file before the Registrar of GI in a representative capacity of the producers of such goods.¹⁶ In India till year 2012, 272 GI has been registered by several States in different classification such as agriculture, handicraft, manufactured, foodstuff (Dharwad Pedha), textile, natural goods (makrana marble of Rajasthan). Out of these, handicraft item is the maximum

¹⁵ Section 2 (e), Geographical Indications of Goods (Registration and Protection) Act, 1999.

¹⁶ Section 11, Geographical Indications of Goods (Registration and Protection) Act, 1999.

registered followed by agricultural product.¹⁷The numbers of registration must have jumped substantially by now.

For instance, for centuries old the Singphos of Assam and Arunachal Pradesh make ‘phalap’ a traditional smoked bamboo tea from the tender tea leaves by boiling it first, dried in the sun or on a heat turf above the fireplace. When the tea is dried it is put or smashed into a bamboo very tightly and placed on the fire till the outer layer of the bamboo is burnt. After that the outer layer burnt is removed using dao (large knife) and only the thin layer remains which is again kept above the fireplace for few weeks. In earlier days, it was made from abundantly found wild teas available in the Singpho inhabited areas. Now a days, it is made from tea-leaves plucked from tiny home grown natural tea gardens of the Singpho people. It is commonly drunk by Singpho and Tangsa tribes and sold in the local markets. The phalap tea can be a potential GI worthy product as a traditional product of Singphos. Likewise Wakro organic green tea by the Mishmis of Lohit District is a potential GI product for its quality and characteristics of tea is unique to this region. Many traditionally created objects or articles held by the community whether agricultural, natural, manufactured (like Monpa carpet, handmade paper, wood carving etc) including food items like indigenous wines or spirits etc. can be registered under the GI Act which will be good for economic upliftment of the community. The best part of the GI Act is the conferment of collective rights to the producers of given GI product as all of the producers can register themselves as the registered authorized users of registered GI good and help them in fetching premium price for the product in the market.¹⁸ This law can prove very beneficial for indigenous products originating from a particular region or territory. Compare to other intellectual property laws, the GI Act is most viable for the protection of traditional cultural intellectual property of indigenous creations. Unlike other IPR, GI right is given for a period of ten years, but may be renewed from time to time.¹⁹

The GI Act has the vast potential to protect, preserve and promote sustainable use of cultural heritage, traditional knowledge and traditional cultural expressions of the indigenous people while improving their economic condition.

6. The Biological Diversity Act, 2002 and the Rules

For a State like Arunachal Pradesh which is a ‘biodiversity hotspot’ in India and having rich traditional knowledge associated to biological resources, the Act above has major significance. The ethnobotanical medicinal knowledge of various tribes as cited before have to be understood in the light of conservation of Biological Diversity, sustainable use of its components and fair and equitable sharing of the benefits arising out of the use of biological resources and associated knowledge. Given the fact that the tribe is unique in having traditional rights over land, water

¹⁷http://www.ipindia.nic.in/writereaddata/Portal/News/283_1_REGISTRATION_DETAILS_OF_GI_TILL_DATE_March_2012_Till_Date.pdf last accessed on 25 October, 2017.

¹⁸ Section 17, Geographical Indications of Goods (Registration and Protection) Act, 1999.

¹⁹ Section 18, *id.*

and forests within their jurisdiction and exercises control over the natural resources within their surroundings. How best it can be reconciled?

The Act has laid down three tiered administrative mechanism in the form of National Biodiversity Authority (NBA), State Biodiversity Board (SBA) and the Biodiversity management Committees (BMC) with specific power and function to regulate access, use, fair and equitable benefit sharing of biological resources. The NBA being the Central body is empowered to grant access permission to the foreigners to obtain any biological resource occurring in India or knowledge associated thereto for research or for commercial utilization or for bio-survey and bio-utilization.²⁰ No person shall apply for any intellectual property right, by whatever name called, in or outside India for any invention based on any research or information on a biological resource obtained from India without obtaining the previous approval of the NBA before making such application.²¹

The NBA has to ensure that the terms and conditions subject to which approval is granted secures equitable sharing of benefits arising out of the use of accessed biological resources, their by-products, innovations and practices associated with their use and applications and knowledge relating thereto in accordance with mutually agreed terms and conditions between the person applying for such approval, local bodies concerned and the benefit claimers.²² The local bodies through BMC and SBB should play a crucial role in this in representing the interest of the benefit claimers in the community. It is more practicable for SBB and BMC to exercise more decisive power in this regard. The Act also allows grant of joint ownership of intellectual property rights to the NBA, or where benefit claimers are identified, to such benefit claimers which is the good part of it.²³ This could be a novel way to recognize the cultural intellectual property rights of the community who are the custodian of traditional knowledge or traditional cultural expressions pertaining to various facets or uses of biological resources including ethnobotanical medicinal knowledge as mentioned previously.

No person, who is a citizen of India or a body corporate, association or organization which is registered in India, shall obtain any biological resource for commercial utilization, or bio-survey and bio-utilization for commercial utilization except after giving prior intimation to the State Biodiversity Board concerned: Provided that the provisions of this section shall not apply to the local people and communities of the area, including growers and cultivators of biodiversity, and vaidis and hakims, who have been practicing indigenous medicine.²⁴ This means SBB does not have much say in the matter as only prior intimation on accessing any biological resource is needed. It may render the SBB a mute spectator perhaps that's why many SBB in north eastern States are not effective in reality. However, SBB is also empowered to regulate by granting of approvals or otherwise requests for commercial utilization or bio-survey and bio-utilization of any biological resource by Indians.²⁵ Good thing is the Act exempts the local indigenous

²⁰ Section 3 (1), Biological Diversity Act, 2002.

²¹ Section 6 (1), *id.*

²² Section 21 (1), *id.*

²³ Section 21 (2), (a), *id.*

²⁴ Section 7, *id.*

²⁵ Section 23 (b), *id.*

medicinal practitioners from such procedural controls. The constitution of national biodiversity fund and state biodiversity fund to be administered by the NBA and SBB respectively is the mechanism through which the objective of fair and equitable benefit sharing can be implemented properly and if implemented properly it can help in economic upliftment of the community who conserve and preserve biological diversity and depend on biological resources for its sustenance.²⁶

The most crucial link of the NBA and SBB is the Biodiversity Management Committee (BMC) at the local panchayat level. Every local body or Panchayat shall constitute a BMC within its area for the purpose of promoting conservation, sustainable use and documentation of biological diversity including preservation of habitats, conservation of land races, folk varieties and cultivars (of plants), domesticated stocks and breeds of animals and microorganisms and chronicling of knowledge relating to biological diversity.²⁷ Undoubtedly the most important function of documentation or chronicling of traditional knowledge on biological resources and biodiversity is entrusted upon the BMC. The BMC formed at the panchayat level can work in association with community experts on biodiversity related knowledge like herbal medicinal practitioners and experts on art and culture. The SBB should create awareness programme for the village panchayats for creating BMC and impart training on documentation of valuable knowledge and information on use and efficacy of biodiversity resources including agricultural knowledge and animal husbandry. From the IPR viewpoint, such documentation of valuable knowledge and information in the 'peoples biodiversity register'²⁸ maintained by the BMC will be helpful in thwarting wrongful granting of patent on invention based on traditional knowledge and information held by the community. Such register will aid the NBA in opposing wrongful grant of IPR on TK associated with any biological resources as mandated in the Act.²⁹ The Act requires the NBA and the SBA to mandatorily consult the BMC while taking any decision relating to the use of biological resources and knowledge associated with such resources occurring within the territorial jurisdiction of the BMC. The BMC's may levy charges by way of collection fees from any person for accessing or collecting any biological resource for commercial purposes from areas falling within its territorial jurisdiction. This will enable to check wrongful misappropriation of biological resources such as endangered species or plants. This system will work best in the jurisdiction of village and community owned forest in the State which belong to a particular clan or a community. The State should constitute local biodiversity fund and allocate funds for it and this should be entrusted to the BMC and the Fund shall be used for conservation and promotion of biodiversity in the areas falling within the jurisdiction of the concerned local body.³⁰

7. The Protection of Plant Varieties and Farmers Rights Act, 2001

²⁶ 'National Biodiversity Fund' and 'State Biodiversity Fund' under Sections 27 and 32 of the BDA, 2002.

²⁷ Section 41 (1), *id.*

²⁸ Peoples' Biodiversity Register can chronicle traditional medicinal knowledge, folk healing, medicinal plants, therapeutic methods, knowledge of food preservation, traditional animal husbandry, agricultural knowledge, native food, wild plants, traditional pest control, water conservation, ecological management, agro-forestry knowledge etc.

²⁹ Section 6, *id.*

³⁰ Sections 42-44, *id.*

It is an Act to recognize and protect the rights of the farmers in respect of their contribution made in conserving, improving and making available plant genetic resources for the development of new plant varieties. This Act was passed after India's ratification of Agreement on Trade Related Aspects of Intellectual Property Rights and to give effect to Article 27 (3) (b) relating to protection of plant varieties. Objective is to protect the rights of farmers and plant breeders and to encourage development of new plant varieties.³¹

The Act defines "farmers' variety" as a variety which has been traditionally cultivated and evolved by the farmers in their fields or is a wild relative or land race of a variety about which the farmers possess the common knowledge.³²The farmers' variety can be registered under the Act if it conforms to such criteria of distinctiveness, uniformity and stability.³³Any farmer or group of farmers or community of farmers claiming to be the breeder of the variety can file an application for registration.³⁴The duration of registration is initially for six years and renewable up to fifteen years from the date of registration of farmers' variety.³⁵ Chapter VI of the Act elaborates the farmers' right, it provides for registration right to a farmer who has bred or developed a new variety, registration of farmers' variety, recognition and reward from the Gene Fund (for conservation of genetic resources of land races/wild relatives etc.), right to save, use, exchange, sell his farm produce etc. but farmer is not entitled to sell branded seed of a protected variety, to claim compensation in crop failure of propagating material etc.³⁶The community rights in the evolution of any variety on behalf of a village or local community is also protected in the Act with regards to compensation from a breeder to be deposited in the Gene Fund.³⁷ The compensation and benefit sharing to the claimants will be provided through the National Gene Fund constituted by the Central Government. Fund supports the conservation and sustainable use of genetic resources undertaken by the Panchayat bodies.³⁸

8. The Patents Act, 1970

The given Act provides defensive protection to some of the traditional knowledge used in new invention. It provides an invention which in effect, is traditional knowledge or which is an aggregation or duplication of known properties of traditionally known component or components are not inventions, therefore not patentable.³⁹A patent granted can be revoked on the ground that the invention so far as claimed in any claim of the complete specification was anticipated having

³¹ Preamble to the Protection of Plant Varieties and Farmers Rights Act, 2001.

³² Section 2 (l), the Protection of Plant Varieties and Farmers Rights Act, 2001.

³³ Sections 14 (c) and 15 (2), *id.*

³⁴ Section 16 (d), *id.*

³⁵ Section 24 (6) (ii), *id.*

³⁶ Section 39, *id.*

³⁷ Section 41, *id.*

³⁸ Section 45, *id.*

³⁹ Section 3 (p), The Patents Act, 1970.

regard to the knowledge, oral or otherwise, available within any local or indigenous community in India or elsewhere.⁴⁰ It may be noted here any TK whether oral or documented such as ethno botanical medicinal knowledge of the community can be protected as an anticipated knowledge in other words as ‘prior art’. These changes were inserted by the Patent Amendment Act of 2002. This move corresponds to the inception of both GI Act, PPVFRA and BDA as mentioned earlier.

Although none of the aforementioned laws defines traditional knowledge, tangible and intangible cultural heritage or traditional cultural expressions nor they cover these subjects comprehensively nonetheless they have important ramifications and can affect the later both in negative or a positive way.

9. The Copyright Act, 1957

Although the Copyright Act has no special provision for traditional artistic works and creations which are held collectively by the community and the author or joint authors cannot be identified in traditional music, dances or other artistic works. However the community has a moral or natural copyright on their traditional artistic expressions. Moreover, Copyright subsist automatically in any original literary, dramatic, musical and artistic works and registration is optional. If the given traditional work is clearly identified with the history and culture of that community who lay claim on it, the Court is most likely to provide relief even in the absence of collective copyright provision applicable in case of community within the Copyright Act. In this regard, it may be noted that documentation of intangible cultural expressions in any permanent form will create copyright prospects for the community in long run and help in checking wrongful misappropriation by others. Undoubtedly the vast potential of copyright law’s ability to protect traditional artistic works has not been used by the Parliament while enacting the law and in the subsequent amendments made in the Copyright Act.

10. Role of community and customary traditional institutions

The various tribes of Arunachal Pradesh have its own traditional institutions with well -defined customary laws albeit uncodified and an effective dispute settlement mechanism at the village level presided by the village headman. The community lives are well regulated through this age old traditional institution. They act as the guardian or the custodian of their cultural heritage and the most important component of the tribal social structure. They also frame social code of conduct and regulates the human and ecological relation in diverse ways. Therefore, it is important that both the formal State system and the traditional institutional set up work in harmony and tandem in preservation and sustainable use of biological diversity and rich cultural heritage.

11. Challenges and way forward

⁴⁰ Section 64 (q), *id.*

Absence of *sui generis* law and inadequacy in the current IP laws to provide adequate protection to TK & TCEs, also lack of documentation of cultural heritage by the community and IPR issues in documentation of the cultural heritage by the outsiders without proper authorization and legal liabilities. These cultural heritage are susceptible to misappropriation by others. The real challenge lie in orientation and familiarization of the community regarding the IPR and to help them recognize IP value and potential underlying their cultural heritage. The diverse community made regulation may be formulated as relevant community protocols and the State will have to establish clear policy and create proper mechanisms to administer the community IPR on cultural heritage and streamline the administrative structure responsible to oversee the IPR issues of the community in different sectors. The Government need to emphasize every department regarding IPR policy implementation in their sectors as every department will inevitably be dealing with respective components of IPR. More research, documentation, funding etc. with the involvement of Community must be encouraged by the government.

12. Conclusion

In the absence of a *sui generis* IP law on TK and traditional cultural expressions, the existing IP laws in the country is the last resort to extend legal protection wherever possible. There is a need to develop a new jurisprudence on traditional cultural IP rights of the indigenous community who has developed, preserved and sustained traditional knowledge base of India's rich civilization. This will mean a new outlook in administering IP laws and its interpretation by the Courts in India. It would also mean bringing more awareness about the social, cultural and economic benefits of IPR to the indigenous people in general and to bridge the gap between the industrial approach to modern day IP and that of customary traditional approach of community IP rights. A new jurisprudence in this aspect will not only protect the rich traditional heritage of the tribal but sustain the nation's cultural plurality.

In the context of Arunachal Pradesh, clan or kinship still pervades and dominates the social cultural institutions and plays a crucial role. Their traditional notion of IP right as manifested in collective social and cultural harmony may appear a misfit for inclusion in the modern paraphernalia of IP law but IP values inherent in their knowledge assets is an essential attribute for the inclusive growth of IP for the Nation. Question is not what tradition or culture got to do with IPR? On the contrary, what is IPR without innovation and creativity which is infused by the rich TK and cultural heritage?

The State Biodiversity Board and its subordinate body like BMC in the State need to be made functional in real sense not only on paper. The SBB should be headed by an eminent expert in the field of biological diversity and TK and BMCs formed at the local level with the direct involvement and supervision of village panchayat. A clear policy guideline in this regard is imperative and a clear interface of customary laws and institutions and the State laws in order to bring about legal coherence in these matters is much needed. Since the legal jurisprudence in this branch of IPR is in its early stage in India its all the more necessary for the State to formulate its policy approach in the light of peculiar social and cultural contexts prevailing in the State. A bottom up approach will be the way forward.

