



Traditional Knowledge in North-East India: scope for a *sui generis* protection

Neelotpal Deka

Gauhati University Institute of North-East India Studies, Gauhati University, Guwahati, India

Abstract

Traditional knowledge (TK) is a collectively owned property and is integral to the cultural or spiritual identity of the social group in which it operates and is preserved. TKs in North-East India are heritage, and therefore, in recent years have assumed immense significance for its protection. The article attempts to trace the legal protection that should be accorded to traditional knowledge in North-East India. North-East India (along with India) does not have any specific legislation for protecting traditional knowledge. This article focuses on insertion of a constitutional provision and also on *sui generis* legal protection of TK in North-East India. This paper also suggests adoption of new law by referring to provisions of various international legislation and national legislations in various countries.

Keywords: Indigenous, Traditional Knowledge (TK), *sui generis*, Intellectual Property, Patent, Prior Art, North-East India.

1. Introduction

Traditional knowledge refers to the knowledge, innovations and practices of indigenous and local communities around the world. Developed from experience gained over the centuries and adapted to the local culture and environment, traditional knowledge is transmitted orally from generation to generation. It tends to be collectively owned and takes the form of stories, songs, folklore, proverbs, cultural values, beliefs, rituals, community laws, local language, and agricultural practices, including the development of plant species and animal breeds. Traditional knowledge is mainly of a practical nature, particularly in such fields as agriculture, fisheries, health, horticulture, and forestry (Convention on Biological Diversity, 2006). In North-East India customary laws and practices often define how these tribes develop, hold and transmit traditional

knowledge. Most of these tribes consider their traditional knowledge as sacred or secret. Some of their customary laws and practices also define custodial rights and obligations, including obligations to guard it against misuse or improper disclosure and also sometimes determine how traditional knowledge is to be used, how benefits should be shared, and how disputes are to be settled, as well as many other aspects of the preservation, use and exercise of knowledge. This requires respect for customary laws and practices of the North East Indian tribes within existing legal mechanisms, including within conventional intellectual property systems – which may require thorough understanding of the relevant provisions of *The Constitution of India* (Fundamental Rights and Directive Principles), Universal Declaration of Human Rights (1948), International Covenant on Economic, Social and Cultural Rights (1966), Human Rights Act

(India, 1993), Agreement on Trade-Related Aspects of Intellectual Property Rights (1994), Patents Act, 1970, (As amended in 2005) (India), Convention on Biological Diversity (1992) along with other related legislations. It is important to note that the Convention on Biological Diversity requires each contracting party 'as far as possible' and 'as appropriate' to identify the economic component of biodiversity for conservation and sustainable use and to adopt 'socially and environmentally sound measures to achieve conservation and sustainable development'. It also ensures the protection of sovereign rights of each country over its biological wealth and associated local knowledge systems. Traditional knowledge holders are subject to both customary and modern legal systems, since their knowledge constitutes subject matter to which both may apply. The interfaces, similarities and differences between customary and modern legal systems require understanding and management. All these aspects are to be looked into when considering a legislation of the protection of traditional knowledge of these tribes.

2. Intellectual property and traditional knowledge

The term "intellectual property" is reserved for types of property that result from creations of the human mind. It refers to creations of the mind: inventions, literary and artistic works, and symbols, names, images, and designs used in commerce. Article 2(viii) of The Convention Establishing the World Intellectual Property Organization (Signed at Stockholm on July 14, 1967) states that the term Intellectual Property includes literary, artistic and scientific works; performances of performing artists, phonograms, and broadcasts; inventions in all fields of human endeavor; scientific discoveries; industrial designs; trademarks, service marks, and commercial names and designations; protection against unfair competition; and "all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields".

In the contemporary world of intellectual property, traditional knowledge (TK) also recognised as intellectual production that is a source of economic and cultural value, especially for local communities in developing countries across the globe. Yet, a legal gap exists between the kinds of protections afforded

by existing intellectual property (IP) law (at international and domestic level) and TK. This legal gap poses serious consequences for the development of the indigenous people in different parts of the world. TK, while recognised as a culturally and economically important arena of intellectual activity, presents a definitional challenge to international IP law.

At present, there is no universally accepted definition for TK. Most international organizations and scholars define TK, in fairly broad terms, as a diverse range of tradition-based innovations and creations resulting from intellectual activity in the industrial, scientific, literary, or artistic fields. For example, TK's rubric covers numerous disparate activities, ranging from performing arts to cultivating agricultural products to medicinal use of plants, to name a few. Such a broad definition which include diverse intellectual fields means that TK can be organized into several subsets, some of which are designated by the terms "genetic resources," "traditional medicinal knowledge," and "folklore", etc.

3. Traditional knowledge of indigenous people of North-East India

Known for its valuable heritage of herbal medicinal knowledge India's ethnic communities and tribes who live in the remote hills and forest areas to a large extent still depend on the indigenous systems of medicine. This ethnic and tribal segment of India's population constitute around 430 communities, of which around 130 major tribal groups (a population of about 8 million people, which is approximately 12% of the total population of India, Census 2001) are settled in hills and plains of North East India, a location within the sub-Himalayan ranges, Indo-Burma, hills of Nagaland, Manipur, Mizoram and Meghalaya plateau and the plains, foothills, N. C. Hills and Karbi Anglong districts of Assam. Being at the confluence of three major bio-geographical realm of the world, the region is extremely rich in floral and faunal biodiversity with several endemic species and represents one of the few hot spots of biodiversity of the world. This region constitutes the states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim and few of the 'indigenous people' in North-East would include Assamese, Bengali, Bishnupriya Manipuri, Chakma, Bodo, Dimasa, Garo, Karbi, Khasi, Kuki, Meitei,

Mizo, Naga, Rabha, Koch Rajbongshi, Mising, Sylheti, Tiwa, Tripuri, Nepali, Hmar, Zeme Naga, Purvottar Maithili, Adivasi, etc.

Use of folk medicines and indigenous folk culture and dresses (for example *Muga* silk) and indigenous cultivation (for example *Jhum* cultivation) is still vital in this region. Various projects carried out and different authors have reported thousands of ethno-medicinal uses and miscellaneous uses in this region. The communities living in this region are very much familiar with the knowledge of plant species in their ecosystems also have a proper understanding of the ecological interactions of the various components of their resources. Their understanding and dependence on nature has been reflected in their traditional culture, local beliefs, folklores and valuable knowledge of ethno-botanical importance. Some of the medicinal uses of these tribal communities are now incorporated in the organised system of medicine, yet most of the folk medicines have remained endemic to certain tribal pockets in North-East India since the knowledge of these medicines acquired through experience is generally passed on by oral traditions as a guarded secret of certain families.

Therefore, a meaningful study of these traditional knowledge is required in the interest of the mankind at large, but at the same time, the study should be able to provide legal protection measures to the knowledge that belongs to these communities.

4. Traditional medicinal herbs and secrecy of ritual regimes in North-East India

In North-East India there are informal IP-like regimes protecting certain subject matter in the field of traditional medicinal herbs. In India, presently there are two systems that governs this area: *codified* systems of traditional medicine (which include indigenous and tribal medicine) on the one hand and *non-codified* systems on the other. The codified systems include the Ayurvedic system of medicine, which is codified in the 54 authoritative books of the Ayurvedic System, the Siddha system, as codified in 29 authoritative books, and the Unani Tibb tradition, as codified in 13 authoritative books. Each of these knowledge systems relates differently to formal and informal systems of protection. While the codified Ayurvedic, Siddha, and Unani Tibb systems are unique to India, there traditional medicinal herbs governed

by the informal IP regimes which regulate them in North-East India. They provided examples of informal IP-like protocols regulating the use of *uncodified* indigenous medicine. In North-East India it is seen that the informal IP regimes are complex of rituals, magic and spiritual beliefs that surround indigenous medicine. These informal regimes perform an equally crucial function in the conception, promotion and diffusion of medical innovations in local and indigenous communities.

One of the informal regimes in North-East India is *secrecy regimes*. The secrecy regime rests on the innovator's ability to prevent the public disclosure of his or her innovation. Under a secrecy regime, innovative healers employ their inventions by themselves only, and benefits arise for the healer only as long as the medicinal knowledge remains hidden. But sometimes it is difficult to maintain secrecy within small communities. Sometimes informal innovators often rely on modifications of traditional techniques, which have been passed down in the community. But on the contrary modern patent law extends legal protection to precisely those ideas which are revealed in their entirety to the public, and therefore, lie beyond the limits of secrecy. By granting time-limited exclusive rights to the inventors once they have disclosed their ideas, patents ensure benefits for innovators while at the same time ensuring that the public gets access to the ideas.

Contrary to a commonly held view, exclusive rights and monopoly powers over informal innovations are not uncommon within indigenous and local communities. Innovators and artists in the communities thereby manage to derive a fair and equitable share of the benefits arising from the use of their innovations within the community. These benefits do not normally take the form of royalties in the meaning of modern IP law. Rather, there a wide variety of benefits for which traditional healers exchange their services, ranging from monetary payments, to commodities (food, trinkets, etc.). Further, the informal TK holders often derive benefits from their rights by transferring portions of their intellectual property to secondary practitioners.

Ritual formulas and incantations often are transferable and have the advantage of allowing extensive licensure (through the training of

apprentices) without requiring inventors to give away unique commodities, such as tools or medicine bundles. At the same time the informal TK holders or healers as well as the communities are grounded in cultural practices and belief systems which instill the rituals with meaning, while they still protect the innovation. Similar shared cultural assumptions underlie the formal IP systems when creators refer to the cultural constructs of “authorship” and “originality” in order to obtain protection. From the intercultural perspective which TK holders considered necessary for an understanding of their IP needs, the reference to the attribute “original” under the formal IP system may function not unlike the attributes “sacred” or “magical” under some informal IP regimes.

It is worth comparing the formal and the informal regimes but before the informal regime dies out their legal protection is necessary. These sacred and secret TKs if not protected through the formal IP regime these store house of knowledge will very soon be wiped out. Therefore, for the greater interest of mankind their documentation is essential.

5. Need for constitutional and legal protection of traditional knowledge of North-East India

The tribal communities living in North-East India see traditional knowledge as their cultural and spiritual identity, but they are yet to see as a pathway to social and economic development. Only awareness generation can show the light to these communities about the potentialities of the traditional knowledge they possess, which could be marketed across the globe. In fact, many consumers in Western countries are turning to treatments based on traditional knowledge, on the understanding that such “alternative” or “complementary” systems are soundly based on empirical observation over many generations. Therefore, considering the rich biodiversity and the rich traditional knowledge system developed by more than 130 major tribal groups over the centuries need to be documented and put to practice with a legal mechanism to regulate. Documentation and a legal system would help preventing invalid granting of patents. For example: Turmeric, Neem, Basmati, etc. A legal mechanism can prevent the misappropriation of traditional knowledge including use of traditional knowledge without benefit sharing or use in a derogatory manner. Basically for these North-East

Indian tribes, legal protection keeping in mind their customary laws will provide recognition to their traditional knowledge. Again, a legal mechanism for the protection of traditional knowledge would recognise the objectives concerning conservation of biodiversity, sustainable use and equitable benefit-sharing of genetic resources. In general, the preservation and protection against loss and degradation of traditional knowledge would work hand-in-hand with the protection of traditional knowledge against misuse and misappropriation. On the process of framing out a legal mechanism of these tribes a multiplicity of complementary measures that may be outside the field of intellectual property law can be considered.

In India it has been a proactive approach to draft national legislations pertaining to the traditional knowledge and bio-resources. Examples of such efforts are reflected in the Biological Diversity Act, 2002, the Protection of Plant Varieties and Farmers’ Rights Act, 2001, the Geographical Indications of Goods (Registrations and Protection) Act, 1999 and also the Patent Act, as amended in 2005. Yet, it could be seen that Western science has recently begun looking at TK as a source of new drugs. The growing phenomenon of bio-piracy shows the somewhat hypocritical attitude of western scientists towards TK, scavenging it on the one hand and claiming patents on all kinds of products derived from TK (Turmeric, Neem, etc.), yet refusing to acknowledge its economic value and ownership. Despite the growing recognition of TK as a valuable source of knowledge, western intellectual property law continues to treat it as part of the “public domain”, freely available for use by anybody. Moreover, in some cases, diverse forms of TK have been appropriated under intellectual property rights by researchers and commercial enterprises, without any compensation to the original creators or possessors of the knowledge. In recent years, a large number of patents have been granted on genetic resources and knowledge obtained from developing countries, without the consent of the possessors of the resources and knowledge, but later on these patents granted by the US Patent and Trademark Office (USPTO) and the European Patent Office on the grounds of its use having been known in India revoked the patent after ascertaining that there was no novelty,

the “invention” having been used in India for centuries.

In these circumstances, in the World Trade Organisation regime with its Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs) in operation fostering globalisation, there is a growing need for the protection of ‘Traditional Knowledge’ as an inherent right of the ‘Indigenous People’, since the existing Intellectual Property Rights (IPR) regime in India cannot encompass and provide protection to all kinds of traditional knowledge.

Under Part III of the *Indian Constitution*, under the Cultural and Educational Rights (Articles 29 and 30), the right of minorities to establish and administer educational institutions is a Fundamental Right, since the minorities are prone to discrimination. The concept of minority is a kind of universal idea in the Indian context. This same concept can be applied to the protection of traditional knowledge of the indigenous people, residing in all parts of India, as an inherent right or in more constitutional terms – a Fundamental Right, by insertion of a new Article.

6. Possibility of *sui generis* protection of TK

Looking at the innovation in medicinal use of plants by the indigenous people the methods could properly be patented. Some of these medicines have been in public domain since ages. These kinds of medicinal use have been prevalent in most of the states in North-East, India. But ‘prior art’ prevents them from getting an IP right (patent) on the method. A patent cannot claim something that already exists, nor can it claim something obvious. To determine this, patent examination always involves looking for ‘prior art’, earlier publications or public knowledge that show the invention is not new or is obvious. But when we look forward for a *sui generis* system of protection of the invention, first we can look into the Peruvian law that defines collective knowledge under Article 2(b) and the TK law in Panama can again be complemented while seeking legislation for North-East India on TK. In Panama, the collective rights of indigenous communities are recognized on their work instruments and traditional art, as well as the technique for making them, expressed in the national basic materials, through the elements of the nature, their method of process and elaboration. Further, the Peruvian laws, which are very comprehensively drafted laws on prior informed consent (PIC) can be to a certain extent a

solution for the North-Eastern tribes in India. The Peruvian law prescribes that those interested in having access to collective knowledge for the purposes of scientific, commercial and industrial application shall apply for the prior informed consent of the representative organizations of the indigenous peoples possessing collective knowledge. The organization of the indigenous peoples whose prior informed consent has been applied for shall inform the greatest possible number of indigenous peoples possessing the knowledge that it is engaging in negotiations and shall take due account of their interests and concerns. The policy makers and drafters of legislation for the North-East India on TK will have to look into these very relevant factors while framing laws.

7. Conclusion

The *sui generis* protection of TK in North-East India is the only way if the region is to protect its resources and heritage from multinational invasion. While considering a *sui generis* system of protection, the most difficulty being that some TKs can be protected under the existing mechanism, and therefore, demarcating line between what can be protected under the existing mechanism and what cannot be protected as TK. Local communities in the North-East India rely on TK for their cultural and economic value. Existing IP law, based on western norms of intellectual activity, is very often inadequate in recognizing such values in the same way it would for other more conventional forms of knowledge that fit into its frameworks. In response, the communities in the region would seek to protect tradition-based intellectual activity in different ways. “Defensive protection” keeps TK separate from IP law, while the “positive protection” seeks to integrate TK into IP law. Therefore, underlying the political and economic implications of bio-piracy is a profound gap between the TK and IP legal frameworks. In legal terms, this gap lies between the elaborate protections granted by existing IP frameworks to other forms of intellectual activity and the inadequate, or often non-existent, protections available for the misappropriated TK belonging to local communities. There are two aspects to look at this problem (1) to what extent a demarcation can be done for the protection of some TK under the existing IP laws and make legislation for the other TKs which cannot be protected under the current legislation (2)

look for possible ways to bridge the legal gap between TK and the modern IP legal framework. Both the perspectives are difficult to achieve, though not impossible. But till the world community reaches a workable framework the protection of TK has to go on. In the context of the communities living in the North-East India and protection of TK in the region, the eight state governments in the region can come together, since the TKs in the region are very much distinctive compared to the rest of the country. But whatever measure is taken the new legislation should not affect the traditional exchange between indigenous peoples of the collective knowledge to be protected.

The legislation should be clear enough on issues like the prior informed consent of the indigenous peoples and should avoid situations where patents are granted for inventions made or developed on the basis of collective knowledge of the indigenous peoples and without any account being taken of that knowledge as prior art in the examination of the novelty and inventiveness of the said inventions. Only then desired goal can be achieved for furthering protection of TK in this region. The eight governments of the region can come forward for legislating an Act since the TKs in this region are very much distinctive than the rest of the country.

References

Convention on Biological Diversity : 2006.

Deepak Acharyya and Anshu Shrivastava 2008 : *Indigenous Herbal Medicines: Tribal Formulations and Traditional Herbal Practices*, Aavishkar Publishers Distributor, Jaipur, India, p.440.

First Schedule of the Drugs and Cosmetics Act, No. 23 of 1940, as amended by the Drugs and Cosmetics (Amendment) Act No. 71 of 1986, specifies the authoritative books of the Ayurvedic, Siddha and Unani Tibb Systems.

Frequently Asked Questions: Declaration on the Rights of Indigenous Peoples, United Nations Permanent Forum on Indigenous Issues. Retrieved on 18-11-2011.

Graham Dutfield, 2001: *TRIPS-Related Aspects of Traditional Knowledge*, 33 Case W. Res. J. Int'l L. 240; TK is an accepted abbreviation for "traditional knowledge" among international organizations and scholars who deal with the topic. See, *Intellectual Property Needs and Expectations of Traditional Knowledge Holders*.

LAW No. 27811, Law Introducing a protection Regime for the Collective Knowledge of Indigenous Peoples Derived from Biological Resources, Peru.

Sudipto Chatterjee and others, *Background Paper on Biodiversity Significance of North East India* (WWF-India, 2006), p.1.

United Nations Declaration on the Rights of Indigenous Peoples (A/RES/61/295), UN Permanent Forum of Indigenous Issues, United Nation, March 2008: Retrieved on 18-11-2011.

WIPO Report on Fact-Finding Missions on Intellectual Property and Traditional Knowledge (1998–1999) (2001) p. 25.

