



INTELLECTUAL PROPERTY RIGHTS: PROTECTION OF TRADITIONAL KNOWLEDGE

Malathi Lakshmikumaran* TERI, India Habitat Centre, Lodhi Road, New Delhi

Traditional Knowledge

Traditional knowledge and / or indigenous knowledge (TK) have no

universally acceptable definition. It encompasses different kinds and functions. This knowledge is generally passed down through the generations but is continually refined and subject to the improvement based on new scientific methods. WIPO currently uses the term TK to refer to traditional based literary, artistic or scientific discoveries, designs, marks, and names and symbols, undisclosed information and all other tradition-based innovations and creations resulting from intellectual activities in the industrial, scientific, literary or artistic fields. TK is expressed in various documented and non- documented forms. The groups that hold TK is diverse, which includes individuals, groups and communities.

India has a rich and varied heritage of biodiversity. Biodiversity, which is defined as the variety and variability among living organisms and the ecological complexes in which they occur, is measured at three levels - the gene, the species, and the ecosystem. India is rich at all levels of biodiversity and is one of the 12 mega diversity countries in the world. The country is also

bestowed with immense agro- biodiversity and a rich diversity in landraces / traditional cultivars / farmers varieties. A number of crop plants (384) are reported to be cultivated in India. A total of 49 indigenous major and minor crops have been reported in the History of agriculture in India.

This vast wild and domesticated biological diversity finds its reflection in the cultural diversity of the people whose very existence is tied to the continued maintenance and sustainable use of biological resources. India has rich ethos of biodiversity conservation and traditional knowledge systems and it is these practices that have given rise to informal and localized in-situ conservation. Traditional farming practices have contributed significantly to the countrys treasure trove of agro-diversity.

This traditional and indigenous knowledge that is interlinked with the countrys rich natural resource base has the potential to provide enormous benefits to humanity in the fields of medicine, health care and biotechnology. Protecting and promoting genetic resources and such knowledge is thus essential for the country. Issues pertaining to intellectual property, misappropriation of such knowledge systems and lack of recognition for the rich genetic

resources of the country and the communities engendering traditional knowledge, however, have led to concerns surrounding the ways and means of protecting and promoting TK in an equitable manner.

Protection of traditional knowledge

The urgency for protection of human, ethical and economic rights of the holders of traditional knowledge is gaining acceptance globally. There are clearly different ways to look at the concept of protection of TK. The protection of TK for some is equated with IPRs where protection essentially means to exclude the unauthorized use by third parties. Others regard protection as a means to conserve traditional knowledge and sustainable use of biodiversity. There are several cases to show the role that this traditional knowledge has played in the development of important drugs, and of the benefits accruing to industry from the leads provided by TK. Use of such traditional knowledge, however, has frequently failed to bring any benefits to the creators, innovators and holders of this knowledge. Indias concerns stem from the need to both protect and promote the use of traditional knowledge in a way that benefits its creators and holders. The now well known cases of misappropriation of TK including the patent on wound healing properties of turmeric and the hypoglycemic

properties of bitter melon and brinjal have led to bitter experiences for India. The country has had to spend extensive amounts of time, money and effort in the revocation of such patents. This implies that the country has to keep track of and assess on a case by case basis whether a patent granted by a foreign patent office to an invention based on material or knowledge obtained from India holds up to the patentability criteria. This is impracticable for a country and hinders true research and scientific development. Instead, internationally acceptable solutions to such misappropriation can not be solved on the basis of domestic legislation and such case by case revocation alone. Considering the tremendous benefits to be obtained from the use of such resources, an international system for recognizing the rights and benefits of communities is a global imperative.

IPR and traditional knowledge must be developed to co-exist in a

complementary fashion. Both systems have merit in their own right and symbolize two very different, yet valuable knowledge paradigms; IPRs encourage innovation by safeguarding investment of time, thought and finances whereas traditional knowledge provides / symbolizes a valuable knowledge base that exists in the public domain.

A number of countries have utilized IP tools to promote and protect

TK. These include:

Copyright

- Industrial designs ^[L]_[SEP]

- Geographical Indications (GI) ^[L]_[SEP]

- Trademarks ^[L]_[SEP]

- Patents ^[L]_[SEP]

- Plant Variety Protection (PVP) ^[L]_[SEP]

Some countries felt that the existing IP laws are not adequate to protect TK. They have enacted or are in the process of enacting sui-generis system of protection. ^[L]_[SEP]

India's initiatives for protection of traditional knowledge

Indian initiatives to deal with these complex issues of IPRs, access to resources and benefit sharing are primarily fourfold, documentation

of knowledge, registering innovations, development of sui- generis systems and the putting in place of domestic legislation dealing with access to resources and IPRs.

Documentation of traditional knowledge and prior art

Given the need to prevent misappropriation, documentation of TK in order to show prior art has become one of the ways India is approaching this issue. Patent examiners could then be provided with proof that the knowledge / material already exists and is in the public domain. This documentation would, therefore, largely be defensive. This documentation also has a flip side, however, in that easy access to such data, some of which may have been unknown or inaccessible previously, could lead to data mining and misuse of information. In the process, communities would lose out.

Despite the disadvantages of this system, however, various initiatives are being taken in the country for data documentation. The Government of India has set up a Traditional Knowledge and Digital Library (TKDL), namely, an electronic database of traditional knowledge in the field of medicinal plants. Such a database would enable the patent examiners to search and examine any prevalent use/ prior art and thereby prevent incorrect grant of patent based on traditional knowledge. At some point, however, the country will have to consider whether to include in the TKDL information that is held in secret by communities and not in the public domain. For this, restricted and regulated access on payment basis may be considered which will help India monitor the usage and the users of this knowledge.

Various other initiatives pertaining to documentation have been taken in the country including the preparation of village wise Community Biodiversity Registers in a few states including Karnataka. Similarly, the Centre of Ecological Sciences, Indian Institute of Science, Bangalore has initiated the creation of plant biodiversity registers. Gene Campaign has carried out a documentation of the TK of the Munnars in S. Bihar, the Bhils of Madhya Pradesh and the Tharus of the Terai. Various Non-governmental Organizations and institutes have taken several other such initiatives.

Registration and innovation patent system

Another system on which work has started in India is the registration of innovations by inventors, which they can then use to prevent any unauthorized use of the innovation. The Honeybee network is a facility for registration of innovations. This is accompanied by the need for providing institutional support to these innovators through the development of green venture promotion funds and the ability to make these innovations commercially viable. Therefore, a National Innovation Foundation (NIF) has been established to build a register of grassroot level innovations in the field of small and cottage industries, fishing, livestock rearing, crop productivity, herbal medicine, etc, mobilize IPRs, convert ideas into commercially viable propositions and information dissemination.

Sui-generis systems

Apart from the sui-generis system already in place with regard to plant varieties as determined by TRIPs, there is much thinking within the country on the development of such systems apart from the existing IPR system to protect knowledge and innovations associated with the biological resource base.

India seeks the incorporation of the following elements within Article 29 of the TRIPs agreement, namely:

- Mention of the source of biological material;
- Recognition of the need for prior informed consent from the source country of the biological material or knowledge.

Incorporation of the latter clause would enable domestic legislation to ensure that the prevalent laws and practices of the country of origin have been fully respected and help to ensure suitable benefit sharing arrangements between the patent holder and the indigenous communities whose TK has been utilized. With this view India has included provisions for disclosure of the source of the biological material within its amendments to the Patents Act 1970 through the Patents (Second) Amendment Bill 2002.