PROTECTION OF TRADITIONAL KNOWLEDGE

Q1. What is Traditional Knowledge?

Traditional Knowledge (TK) is defined as the knowledge continually developed, acquired, used, practiced, transmitted and sustained by the communities/individuals through generations. TK is a collectively owned asset and indicates the cultural or spiritual identity of the social group in which it operates and is preserved. In other words, TK is an open-ended way to refer to tradition-based literary, artistic or scientific works; performances; inventions; scientific discoveries; designs and handicrafts marks, names and symbols; undisclosed information; and all other tradition based innovations and creations resulting from intellectual activity.

In India, Traditional knowledge refers to the knowledge, innovations and practices of indigenous communities which they have developed over many generations with traditional utilization of natural resources including environment, flora, land etc. TK is mostly undocumented and typically inherited via word of mouth from generation to generation. The World Intellectual Property Office (WIPO) defines TK as indigenous knowledge relating to categories such as agricultural knowledge, medicinal knowledge, biodiversity related knowledge, and expressions of folklore in the form of music, dance, song, handicraft, designs, stories and artwork. Examples are as follows:

- Use of turmeric (*Curcuma longa*) for medicinal purposes.
- Use of ashwagandha (Withania sominifera) to treat heart related ailments.
- Traditional healing practices such as Yoga.

Q2. What are the important features of TK?

Traditional knowledge is sustained through generations. TK therefore is holistic, qualitative, moral, spiritual, intuitive, etc.

Q3. What is the patentability status of Traditional Knowledge?

Indian patent laws do not permit protection of TK Under section 3 (p) of the Indian Patent Act, 1970, An invention which in effect, is traditional knowledge or which is an aggregation or duplication of known properties of traditionally known component or components is not an invention and cannot be patented.

However, if there is a substantial improvement in the existing TK to enable the invention fulfill the criteria under the Indian IP law, IP protection can be sought.

Q4. How does Indigenous Traditional Knowledge differ from western science?

In our country, TK systems exist principally in the form of songs, proverbs, stories, folklore, community laws, common or collective property and inventions, practices, rituals etc. Unlike the western custom of disseminating knowledge through Courtesy: publication, academic and literary modes, the TK is transmitted from forefathers to the community, not private to one individual or small group, whereas western science possesses a systemic, analytical and compartmentalized approach.

Q5. What are the key issues for IP protection of TK?

The key issue for protecting TK is prior disclosure of the innovation as much of TK is already in public domain being passed on orally or through documentation through generations. This makes most TK ineligible for IP protection as most information is already part of "prior art" and therefore there is very little in terms of novelty that needs to be established for patent protection.

Q6. How important is Traditional Knowledge?

TK is an integral part of strength of local community knowledge. Attempts to exploit TK owned by local communities for industrial or commercial benefit is a major issue as it is unfair exploitation of knowledge owned by local communities as IP protection creates monopoly of patent owner Governments the world-over including India have enacted laws to prevent such unfair exploitation of TK.

Q7. What is TKDL?

TKDL stand for Traditional Knowledge Digital Library and it is collaborative project of the Government of India through the Council of Scientific and Industrial Research (CSIR) and the Ministry of AYUSH. to provide information on traditional knowledge existing in India, in various languages and format as a single repository. TKDL serves as a reference of prior arts for patent examiners at International Patent Office's (IPOs).

Q8. What are the features of TKDL?

The two main features of TKDL are 'Accessibility' and 'Availability'. TKDL provides accessibility in terms of 'Language, format and Classification'. The Indian traditional knowledge exists in local languages such as Sanskrit, Urdu, Arabic, Persian, Tamil, etc, and TKDL translates this traditional knowledge into the native languages of the patent examiners, including the five languages of "English, French, Spanish, German and Japanese."

The *format* of TKDL is also unique and laid down in a format similar to the "patent application format, which is easily understandable by patent examiners." The full listing for each TK entity contains a

bibliography of traditional Indian documents, and the bibliography contains links to scanned images of these documents in the original language.

Other feature is the *classification*. TKDL has created a new classification system for the traditional knowledge, known as the "Traditional Knowledge Resource Classification (TKRC)" and is "based on the structure of International Patent Classification (IPC)." Each listing in the TKDL includes both TKRC codes and IPC codes.

Another main feature is the availability of TKDL. TKDL in complete form is available only to certain national patent offices for use by patent examiners. However, a "representative" version of the database is available at the TKDL website. This database has 1,200 representative listings.

Q9. What is TKRC?

TKRC stands for Traditional Knowledge Resource Classification (TKRC) is an innovative classification system of TKDL. TKRC has structured and classified the Indian Traditional Medicine System in approximately 25,000 subgroups for Ayurveda, Unani, Siddha and Yoga. TKRC has enabled incorporation of about 200 sub-groups under A61K 36/00 as defined in the International Patent Classification instead of few sub-groups earlier available on medicinal plants under A61K 35/00 thus enhancing the quality of search and examination of prior-art with respect to patent applications field in the area of traditional knowledge.

Q10. What are the legal aspects for the utilization of TK?

For IP protection and utilization of TK following issues needs to be considered:

- i. **Prior Informed Consent**: A prior consultation or documented consent from traditional knowledge holders must be acquired by third parties before using their knowledge.
- ii. **Equitable Benefit Sharing**: This balances the interests of the right holders and the general public, i.e., the knowledge holders must be appreciated with compensatory payments or other non- monetary benefits for using their traditional knowledge for commercial or public health purposes.
- iii. **Unfair Competition**: The TK and its practitioners must be protected against any unfair practices such as false claims, illegal use of knowledge, etc. The unfair completion law has been extensively used for protection of integrated circuits, layout designs, geographical indications, undisclosed information and test data and this could be extrapolated for the protection of TK.
- iv. **Distinctive signs:** Traditional signs, symbols and terms associated with TK may be protected as distinctive marks. Such signs may be exploited as trademarks, collective marks, certification marks and geographical indications.

- v. **Customary laws**: These laws define how traditional communities develop, hold and transmit TK.
- vi. **Contracts**: Legally binding documents between parties to outline and **e**nforce access and benefit sharing agreements as well as trade secrets. For example: Confidentiality/non-disclosure agreements, Exclusive licenses etc. Contracts relating to TK.

Q11. Are there other mechanisms for the protection of traditional knowledge?

As per the Indian Patent system, it is not possible to protect Indian TK. However, there are some non-IP based mechanisms for protecting TK which are covered by International conventions such as:

- i) "UN Convention to Combat Desertification" for protection of traditional knowledge in the ecological environments and sharing of benefits arising from commercial utilization of such TK:
- ii) "Primary Health Care Declaration" by WHO recognized the relevance of traditional knowledge in the field of medicine;
- iii) the "Doha Declaration" by World Trade Organization which has , instructed the TRIPS Council to examine issues regarding the protection of traditional knowledge emerging from the trade and development; and
- iv) "International Treaty on Plant Genetic Resources for Food and Agriculture" which recognizes farmers rights and protects traditional knowledge pertaining to plant based food and agriculture.

Q12. What are Access and Benefit Sharing (ABS) regimes?

Access and Benefit Sharing (ABS) refers to granting permission to enter an area for the purpose of sampling, collecting, and removing genetic or other resources. Benefit sharing refers to all forms of compensation for the use of genetic resources, whether monetary or non-monetary. This might also include participation in scientific research and development of genetic resources, and sharing the findings of any potential benefits resulting from this work. In other words "ABS" regimes are set of rules and regulations at national level implementing one of the objectives from the UN Convention on Biological Diversity (CBD), which seeks to compensate the country of origin of the genetic resources, should the materials be commercialized.

Q13. How are plant varieties protected in India?

The plant varieties are protected through methods such as Sui generis system, or plant breeding or The International Union for the Protection of New Varieties of Plants (UPOV) In principle, patenting of

higher life forms such as plants or animals are not patentable subject matter under section 3 (j) and 3 (h) of the Indian Patents act, wherein section 3 (j) states that "plants and animals in whole or any part thereof other than microorganisms but including seeds, varieties and species and essentially biological processes for production or propagation of plants and animals" are considered non patentable matter and section 3 (h) states that "a method of agriculture or horticulture" is not patentable.

Q14. What is UPOV?

UPOV was established by the International Convention for the Protection of New Varieties of Plants, in synchrony with WIPO"s objective to protect plant varieties. UPOV's mission is to provide and promote an effective system of plant variety protection, with the aim of encouraging the development of new varieties of plants.

Q15. What is sui generis system for protection of plant varieties?

Sui generis is a system of protection for plant varieties as an alternative or addition to a patent system for protecting plants. Accordingly in India plant protection came into being for new plant varieties as Protection of Plant Varieties and Farmers' Rights (PPVFR) Act in 2001.