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**CORE Centre for  
Organisation Research &  
Education**



**Indigenous Peoples' Centre for Policy & Human Rights among  
India's Indigenous Peoples**

**NGO in Special Consultative Status with the Economic & Social Council of the  
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## Conclusions and recommendations:

- We are not in a developing dynamic of the so-called developing countries but in a dynamic of impoverishment, if we understand development not only in financial and socio-economic terms but also as expansion of human capabilities. In the indigenous understanding this would intrinsically incorporate the well being of the natural world as well as the human in a gender sensitive manner.
- Many countries, such as India, are dealing with cultural diversity that colonization tried and still try but did not succeed to suppress in the same manner with the same genocidal and ethnocidal results.
- Languages, which reflect perceptions of the world and its character, how to survive and flourish in it, together with the natural world, express this diversity, in which humanity survives. This diversity of languages cannot be maintained outside of a given culture, outside of a given territory, out of a given natural or social environment and constant reference to its reality.
- Alien and imposed abstractions and inscription of languages impoverishes the forms (skills of communication) meanings, attitudes and the images of the language.
- Indigenous culture survival and evolution (learning, education, knowledge, skill development, heritage etc), requires preservation and maintenance of integrity of indigenous lands and environments and of its social and cultural structures.
- A culture can survive and flourish only if it can integrate self-selected elements from encounters with other cultures.
- Developers, therefore, must also know and understand the implications of indigenous communication: that the credibility of the message, in oral societies, is strongly predicated on the credibility of the messenger and remembered experiences of encounters.
- Indigenous knowledge is preserved and transmitted through very different means: dances, trance communications, songs, handicraft etc. Its retention, transmission and evolution is managed through a complex legal and operative framework of rights, powers and obligations relating to the use and management of the land and the natural resources it contains.

- These "customary laws and practices" are the guarantee of the on-going creation and maintenance of diversity, including biological diversity.
- Dominant schooling and education are totally unable to transmit indigenous knowledge because of its abstract language and because it occurs in an abstract space with little or no life-relationship with what is taught. Indigenous education has to be done in indigenous languages, indigenous territories and indigenous cultural and physical environments in indigenous methodologies and by teachers properly trained in indigenous methodologies, cosmologies, and knowledge content.

## **Learning & Language:**

Indigenous knowledge is so intimately connected to specific local natural elements that particular earth, water or rock formations are identified, recognized and named by the concerned knowledge holders in relation to the proliferation of specific sub-species in season. This knowledge is their birthright, the foundation of their heritage, which they cannot access without their lands intact. Indigenous children have the right to learn their lands in the traditional manner through the experience of it, and so inherit the guardianship of their peoples since time immemorial. Safeguarding these rights is vital as a resource not only for indigenous peoples but for all peoples.

Indigenous children's rights to participate in their own cultures, to leisure and recreation are therefore integral with full and free access to their traditional lands. Through games, leisurely exploration, rituals, songs and stories, and practical participation in community responsibilities according to their age and capacity, the roles, characters and settings of which are tangible or immediately verifiable and experiential ingredients or members of their life experience, children learn to enjoy and explore their natural, cultural and bodily space. Norms of behaviour and conduct towards the natural and social environment are absorbed with very little teaching rather through simple encounters with the world that commands respect of its very nature.

In indigenous understanding, culture and identity cannot be separated from the land and survive, any more than a foetus can survive severed from its umbilical connection. Certainly these languages cannot. Indigenous peoples draw their spirituality, cultural values and collective identity from the land, and their traditional languages, laws, customs and practices reflect this attachment. The Earth lies at the centre of their cosmologies, and connects them with their past, as home of their ancestors, their present, as provider of their material needs, and their future, as a legacy that they hold in trust for their children. It is not only a

resource for survival, but also the fundament, source of and intrinsic element in, indigenous understanding of reality structure: the very bones of their languages

Why there is a need to protect it, and what can be achieved? The main arguments for protection are considered under the headings of equity, conservation, preservation of traditional lifestyles, prevention of bio-piracy, and promoting the use of traditional knowledge and its importance in development. Intellectual Property Rights, as a legal tool, may be appropriate and efficient under certain circumstances, but inadequate, ineffective or actually counter-productive in others. For example, the recognition or establishment of new types of Intellectual Property Rights on traditional knowledge may reduce rather than promote the use of such knowledge (e.g. in medicines or in the exchange of farmers' materials) and policy-makers need to balance the expected benefits against the comprehensive costs of such limitations. Another problem is the essential incompatibility between the concepts of western Intellectual Property Rights and the practices and cultures of local and indigenous communities.

Since different objectives (such as equity, conservation, preventing misappropriation, etc) may be sought when the "protection" of traditional knowledge is pursued, a basic point is the extent to which particular forms of Intellectual Property Rights may be suited or not to reach the objectives. Different strategies may be followed to protect traditional knowledge under Intellectual Property Rights, including the application of existing modes of protection, the development of a *sui generis* regime, or a combination of both.

As is another option – the enforcement of customary laws which, in some cases, recognize certain forms of ownership over traditional knowledge are concerns about the feasibility, effectiveness, costs and acceptability of possible legal systems for traditional and indigenous communities.

Alternatively, protection may be seen as a mechanism to prevent third parties from unduly appropriating traditional knowledge - the misappropriation. The development of a misappropriation regime requires the documentation of traditional knowledge, the ability to prove the origin of resources used in Intellectual Property Rights claims, and a requirement for consent from its traditional owners. In any case, the difficulties of effectively enforcing rights may be significant and dilute the value of any legal approach.

The issue of traditional knowledge protection has been addressed in some national laws and constitutions. A clear legislative pattern, however, does not emerge so far. Debates have also taken place in different international fora, where numerous studies and proposals have been made. Despite all these efforts, many questions about objectives, tools and feasibility of traditional knowledge protection and access remain unanswered in the dominant paradigm. While work on the subject needs to be pursued with the participation of the rights holders, attention to legal protection should not overshadow the fact that the access to land and the preservation of the communities' own lifestyles, are

indispensable conditions for the preservation and further development of traditional knowledge. It seems premature to promote international Intellectual Property Rights-type standards for traditional knowledge protection at present framework and global rules to prevent misappropriation of traditional knowledge without a clear analysis, comprehension and agreement of the traditional systems of rights-holding and benefit sharing.

Indigenous and local communities have used traditional and indigenous knowledge for centuries under local laws, customs and traditions. It has been transmitted and evolved from generation to generation. Traditional knowledge has played, and still plays, an important role in vital areas such as food security, the development of agriculture and medical treatment. However, government policies have not, in general, recognized any significant value in traditional knowledge nor any obligations associated to its use, and have passively consented to or accelerated its loss through the destruction of the communities' living environment, cultural values and denial of political recognition.

Recently, Western science has become more interested in traditional knowledge and realized that traditional knowledge may help to find useful solutions to current problems, sometimes in combination with "modern" scientific and technological knowledge. Despite this growing recognition, it has generally been regarded under Western intellectual property laws as information in the "public domain", freely available for use by anybody. Moreover, in some cases, diverse forms of traditional knowledge have been appropriated under intellectual property rights by researchers and commercial enterprises, without full knowledge and consent let alone compensation to the creators or possessors, a form of intangible "terra nullius" with modern day academic Magellans, Columbuses and Cooks occupying evicting dispossessing and excluding the rightful owners of this heritage.

## **Threats to biodiversity:**

Threats to species are principally due to decline in the areas of their habitats, fragmentation of habitats and declines in habitat quality. Fragmentation raises the extinction risk because of isolated sub populations can go extinct one by one without being repopulated. Stochastic population decline in small subpopulations makes it more likely that they will go extinct, and this is further exacerbated by the reduction of genetic variability in subpopulations resulting threats. For aquatic and semi aquatic species, the declines in habitat quality are due to the diversion of ground and surface water, resulting in the drying up of streams and other water bodies, from siltation and pollution from pesticides and other chemicals . Freshwater fish are also threatened by the introduction of exotic species which may be predators or competitors. Loss of biodiversity may trigger large unpredictable changes in an ecosystem and some of these may adversely impact agriculture or human health, perhaps through induced changes in hydrology or pest population.

It is the last source of value, the preference of an elite minority that has been the principles driver of policies to conserve biodiversity in India. These have taken the form of legislation such as the wildlife protection act of 1972 and its various amendments and forest conservation act of 1980 that extended the colonial forest acts of 1878 and the 1927 to evict inhabitants of forests and other wild areas by declaring larger areas of forest or other wild areas “Reserved” “protected” Wild life sanctuaries” or National parks and stripping them of their rights to exploits these natural resources. This was possible when political power was centralized in the congress party. The system of restrictions on the rights of user of poor, largely tribal, forest dwellers has become in the absence of political commitment to protect wild habitat and extortion mechanism.

## **Intellectual Property Rights and Indigenous Peoples (IPRs):**

The protection under intellectual property rights (IPRs) of traditional and indigenous knowledge (IK) has received growing attention since the adoption of the Convention on Biological Diversity (CBD) in 1992. There is need to provide some form of protection to IK. For this reason, it is necessary to understand the importance and scope of IK – which includes its widespread use in traditional medicine and farming, along with the question of its definition.

Why there is a need to protect it, and what can be achieved? The main arguments for protection are considered under the headings of equity, conservation, preservation of traditional lifestyles, prevention of bio-piracy, and promoting the use of IK and its importance in development. IPRs, as a legal tool, may be appropriate and efficient under certain circumstances, but inadequate, ineffective or actually counter-productive in others. For example, the recognition or establishment of new types of IPRs on IK may reduce rather than promote the use of such knowledge (e.g. in medicines or in the exchange of farmers’ materials) and policy-makers need to balance the expected benefits against the comprehensive costs of such limitations. Another problem is the essential incompatibility between the concepts of western IPRs and the practices and cultures of local and indigenous communities.

Since different objectives (such as equity, conservation, preventing misappropriation, etc) may be sought when the “protection” of IK is pursued, a basic point is the extent to which particular forms of IPRs may be suited or not to reach the objectives. Different strategies may be followed to protect IK under IPRs, including the application of existing modes of protection, the development of a *sui generis* regime, or a combination of both.

As is another option – the enforcement of customary laws which, in some cases, recognize certain forms of ownership over IK are concerns about the feasibility,

effectiveness, costs and acceptability of possible legal systems for traditional and indigenous communities.

Alternatively, protection may be seen as a mechanism to prevent third parties from unduly appropriating IK - the misappropriation. The development of a misappropriation regime requires the documentation of IK, the ability to prove the origin of resources used in IPRs claims, and a requirement for consent from its traditional owners. In any case, the difficulties of effectively enforcing rights may be significant and dilute the value of any legal approach.

While work on the subject needs to be pursued – with the participation of the intended beneficiaries – attention to legal protection should not overshadow the fact that the access to land and the preservation of the communities' own lifestyles, are indispensable conditions for the preservation and further development of IK. It seems premature to promote international IPRs type standards for IK protection at present and global rules to prevent misappropriation of IK.

Traditional and indigenous knowledge (IK) has been used for centuries by indigenous and local communities under local laws, customs and traditions. It has been transmitted and evolved from generation to generation. IK has played, and still plays, an important role in vital areas such as food security, the development of agriculture and medical treatment. However, government policies have not, in general, recognised any significant value in IK nor any obligations associated to its use, and have passively consented to or accelerated its loss through the destruction of the communities' living environment and cultural values.

Recently, Western science has become more interested in IK and realized that IK may help to find useful solutions to current problems, sometimes in combination with “modern” scientific and technological knowledge. Despite the growing recognition of IK as a valuable source of knowledge, it has generally been regarded under Western intellectual property laws as information in the “public domain”, freely available for use by anybody. Moreover, in some cases, diverse forms of IK have been appropriated under intellectual property rights by researchers and commercial enterprises, without any compensation to the knowledge's creators or possessors.

IK is a central component for the daily life of millions of people in developing countries. Traditional Medicine (TM) serves the health needs of a vast majority of people in developing countries, where access to “modern” health care services and medicine is limited by economic and cultural reasons. It is often the only affordable treatment available to poor people and in remote communities.

Similarly, the use and continuous improvement of farmers' varieties (landraces) is essential in many agricultural systems. In many countries, seed supply

fundamentally relies on the “informal” system of seed production, which operates on the basis of the diffusion of the best seed available within a community, and on its movement, even over large distances during migration or after disaster.

TM also plays a significant role in developed countries, where the demand for herbal medicines has grown in recent years. Moreover, many pharmaceutical products are based on, or consist of, biological materials. Plants, in particular, are an important source of medicines.

The knowledge of traditional and indigenous farmers relating to cultivated plants has also been a central element for the development of new plant varieties and, most importantly, for food security on a global scale. The importance of IK for its creators and for the world community at large, and the need to foster, preserve and protect such knowledge, has gained growing recognition in international fora.

Thus, in 1981 a WIPO-UNESCO Model Law on Folklore was adopted;

1989 the concept of “Farmers Rights” was introduced in the FAO International Undertaking on Plant Genetic Resources;

1992 the Convention on Biological Diversity (CBD) specifically addressed the issue (article 8(j)).

2000, an Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore was established by the World Intellectual Property Organisation (WIPO) and it first met in April 2001.

## **Traditional Knowledge in India:**

Traditional Knowledge (TK) is essentially culturally oriented or culturally based, and it is integral to the cultural identity of the social group in which it operates and is preserved. “*Traditional knowledge*” is an open-ended way to refer to tradition-based literary, artistic or scientific works; performances; inventions; scientific discoveries; designs; marks, names and symbols; undisclosed information; and all other tradition-based innovations and creations resulting from intellectual activity.

“Tradition-based” refers to knowledge systems, creations, innovations and cultural expressions which have generally been transmitted from generation to generation; are generally regarded as pertaining to a particular people or its territory; and are constantly evolving in response to a changing environment. It tends to be developed in a way that is closely related to the immediate environment in which traditional communities dwell, and to respond to the changing situation of that community.

Process leading to the creation of TK may not be formally documented in the way that much scientific and technological information is recorded. The apparent

non-systematic manner of creation of traditional knowledge does not diminish its cultural value, or its value from the point of view of technical benefit.

The current IPR system cannot protect traditional knowledge for three reasons. First, the current system seeks to privatize ownership and is designed to be held by individuals or corporations, whereas traditional knowledge has collective ownership.

Second, this protection is time-bound, whereas traditional knowledge is held in perpetuity from generation to generation.

Third, it adopts a restricted interpretation of invention which should satisfy the criteria of novelty and be capable of industrial application, whereas traditional innovation is incremental, informal and occurs over time. A *sui generis*, or alternative law is therefore necessary to protect traditional knowledge.

## **Attempts at Protection of TK in India:**

Recently amended patent law of India contains provisions for mandatory disclosure of source and geographical origin of the biological material used in the invention while applying for patents in India. Provisions have also been incorporated to include non-disclosure or wrongful disclosure of the same as grounds for opposition and for revocation of the patents, if granted.

To protect traditional knowledge from being patented, provisions have also been incorporated in the law to include anticipation of invention by available local knowledge, including oral knowledge, as one of the grounds for opposition as also for revocation of patent. In order to further strengthen these provisions, a new provision has been added to exclude innovations which are basically traditional knowledge or aggregation or duplication of known properties of traditionally known component or components from being patented.

India is a party to the Convention on Biological Diversity (CBD), which came into force in December 1993. The CBD offers opportunities to India to realize the benefit of these resources. India has already enacted an Act to provide for protection of biological diversity, sustainable use of its components and equitable benefit sharing arising out of the use of the biological resources. It addresses the basic concerns of access to, collection and utilization of biological resources and knowledge by foreigners and sharing of benefits arising out of such access.

The legislation also provides for a National Authority, which will grant approvals for access, subject to conditions, which ensure equitable sharing of benefits. The main intent of this legislation is to protect India's biodiversity and associated

knowledge against their use by individuals/ organization without sharing the benefits arising out of such use and also to check bio-piracy. The legislation provides for a federal management structure with the National Biodiversity Authority (NBA) at the apex and Biodiversity Management Committees (BMCs) at local community level.

The BMC and the NBA is required to consult BMC in decisions relating to the use of biological resources/ related knowledge within their jurisdiction. The legislation also provides for promotion of conservation, sustainable use and documentation of biodiversity. Prior approval of NBA would be required for applying for any form of IPR within or outside India for an invention based on research or information on biological resource obtained from India.

The Indian legislation for the Protection of Plant Varieties and Farmer's Right Act 2001 also acknowledge that the conservation, exploration, collection, characterization evaluation of plant genetic resources for food and agriculture are essential to meet the goals of nation food and nutritional security as also for sustainable development of agriculture for the present and future generations. It also acknowledges that the plant genetic resources for food and agriculture are the raw material indispensable for crop genetic improvement.

The concept of effective benefit sharing arrangement between the provider and the recipient of the plant genetic resources forms an integral part of our Act. The amount of benefit sharing will be based on the extent and nature of the use of genetic material of the claimant in the development of the variety and also the commercial use and sale in the market of the variety. To make this meaningful, mandatory disclosure of the geographical location from where the genetic material has been taken and information relating to the contribution, if any, of the farming community involving such variety, has been made. The protection provided to a plant variety bred by a breeder can be cancelled if there is an omission or wrongful disclosure of such information.

The Geographical Indication of Goods (Registration and Protection) Act, 1999 passed by Parliament is another step taken by India. The Act primarily intends to protect the valuable geographical indications of our country. The protection under the Act is available only to the geographical indication registered under the Act and to the authorized users. The Act permits any association of persons or producers or any organization or authority established by law representing the interest of the producer of goods to register a geographical indication. It may be possible for the holders of the traditional knowledge in goods produced and sold using geographical indication can register and protect their traditional knowledge under this law.

Various suggestions have been advanced in India to extend protection to knowledge, innovations and practices. These include: (i) documentation of TK; (ii) registration and innovations patent system; and (iii) development of a sui

generis system. It is sometimes believed that proper documentation of associated TK could help in checking bio-piracy. Documentation could be a double-edged sword. It is also hoped that such documentation would facilitate tracing of indigenous communities with who benefits of commercialization of such materials/ knowledge has to be shared.

Documentation has one clear benefit. It would check on TK in the public domains that are today difficult to prevent due to lack of availability on information with patent examiners. Documentation of traditional knowledge is also acknowledged as a means of giving due recognition to the traditional knowledge holders.

This particular aspect of documenting formulations in the Ayurvedic system of medicine in India in the shape of Traditional Knowledge Digital Library (TKDL) is already on. The scope of the TKDL work relates to the transcription of 35,000 formulations used in Ayurvedic system of medicines. Also in India, preparation of village-wise Community Biodiversity Registers (CBRs) for documenting all knowledge, innovations and practices has been undertaken in a few States.

With all these efforts some experts still suggest that a *sui generis* system separate from the existing IPR system should be designed to protect the traditional knowledge of the local and indigenous communities of India. However, the parameters, elements and modalities of a *sui generis* system are still being worked out.

Article 11 of DRIP says that Indigenous peoples have the right to practise and revitalize their cultural traditions and customs. This includes the right to maintain, protect and develop the past, present and future manifestations of their cultures, such as archaeological and historical sites, artefacts, designs, ceremonies, technologies and visual and performing arts and literature. *Article 32* (1) Indigenous peoples have the right to determine and develop priorities and strategies for the development or use of their lands or territories and other resources. (2) States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other resources, particularly in connection with the development, utilization or exploitation of mineral, water or other resources. (3) States shall provide effective mechanisms for just and fair redress for any such activities, and appropriate measures shall be taken to mitigate adverse environmental, economic, social, cultural or spiritual impact.

## **General background on the North Eastern region:**

The Northeast Region (NER) of India, comprising the states/provinces of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura, and recently added Sikkim, is the ancient homeland of around one hundred groups of indigenous peoples. Some of these are intermingled with those of Kuki-Chin, Han, Khmer, and Tibeto-Burman origin who have integrated through generations with autochthonous peoples of the these lands as well as, more recently, with groups of sub-continental India.

The region is mountainous and intersected with alluvial valleys of the Brahmaputra and Barak river systems. It incorporates the lower Himalayan ranges east of Everest and Kanchinjunga peaks - the growing tip, as it were, of the Himalayas as they rapidly cascade into the Ganga-Meghna delta of Bangladesh and are thus affected by glacial melt. The terrain hosts an immense and unique biodiversity that is enhanced by the geomorphic age and geological variegation of a relatively young and evolving array of systems. Rich in minerals (including oil, coal, uranium deposits with high proportions of fissionable isotope, well-forested lands, and substantial surface water wealth that has a high potential for hydro-power generation and irrigation), the area is being subjected to a complex and multi-faceted assault to acquire, privatize, and exploit these resources.

Much of the verdant northeastern region of India, some of it ordinarily inundated at this time of the year, has experienced deficient rainfall. The region is faced with a paradox that stems from the failure of governments to go for coherent long-term plans for rain harvesting and water management aided by strategies to check soil degradation, deforestation, illegal lumbering, quarrying, and mining. Except Mizoram, which received 1016 mm of rainfall during the period January-August, all the States recorded deficits ranging from 52 per cent to 14 per cent, reflecting the characteristic spatial variability of the monsoon even within homogenous regions. The situation is particularly stark in Meghalaya and Assam, which have not seen even a moderate drought since the 19th century: the last recorded instance was in 1896.

In Cherrapunji in Meghalaya, no more the wettest but still one of the wettest inhabited places on earth, women today trek long distances to fetch water: the region has lost its green cover and topsoil *after years of slash-and-burn agriculture*. Five districts of Assam saw flood waters rolling by at the start of the monsoon season, which forced about seven lakh people out of their homes. But since then there has been no rain, and the State Government, which has termed the situation "drought-like", is apparently waiting for the monsoon season to be over to make a formal declaration.

More than a million farm families have been affected in 22 of the 27 districts. Rice crops have withered, and production will be far short of the targeted four million tonnes. Peasant families numbering about 10 lakh, and agricultural labourers numbering 12 lakh, are bearing the brunt. Also hit is the 430-sq.-km

Kaziranga National Park, home to 1,850 endangered one-horned rhinos. Adding to the woes will be the impact on hydel power generation (the region has 41.5 per cent of the national potential) and industrial production. Immediate steps need to be taken to prevent large-scale unemployment, food scarcity, a fall in income levels and worse. As the Assam State Kisan Sabha has pointed out, in the absence of intervention, farmers may be pushed to the brink, a la Vidharbha and Wayanad. It is unclear if the State Governments and the Centre have comprehended fully the gravity of the situation. In Assam, for instance, all that the Government seems to have done is to announce a waiver of land tax and diesel distribution in meager quantities to pump water from wells. Some of the States have demanded that the Centre send its teams to assess the level of distress and announce ameliorative measures. This can hardly wait, now that the retreat of the monsoon is imminent. Also needed is a campaign to encourage water conservation. A region that is already lagging behind on the development front owing to a range of complex factors, including a history of unrest, should not be allowed to suffer on yet another front.

The policy shifts noted are also real. This is verifiable in the radical alterations proposed in legislation and programming priorities and most evident in budget allocations and unashamed government support of interventions and proposals for interventions which would, without the fiscal and economic incentives emerging currently, be viewed as unviable regarding execution and inadmissible in terms of India's policies and laws.

## **Indigenous Knowledge (IK) :**

Indigenous communities in the region share a very close interdependent relationship with their surroundings including the natural resource since time immemorial. This relationship has helped them develop a very distinctive but sound understanding of their surroundings. Consequently, this understanding, developed into knowledge systems handed down from one generation to another evolved into the basis for a vast array of processes from complex and sophisticated technologies of land and water management to health and pedagogies. These systems of knowledge are known as Indigenous Knowledge (IK). IK having developed in tandem with the natural world has a direct impact on biodiversity conservation and proliferation and vice versa.

Since complex terrain and rich biodiversity facilitates breeding of IK, IK is very locale specific. IK is thus closely intertwined with the topographical and bio-resources available in communities traditional habitats or territories. Some form of operative framework of rights, powers and obligations relating to the use and management of the natural resources has often developed inextricably with the actual usage technologies. These may be termed as customs or customary laws. Customary practices pertaining to biodiversity may take the following forms:

Belief systems which guide people's relation with the entities around them (for example, the concept of sacred groves and sacred sites), Socio-political and economic systems including the mode of resource use relations of property and custodianship, patterns of leadership etc. Indigenous Knowledge systems which may be either purely oral in retention and transmission format such as the knowledge held by tribal communities and unscripted systems such as Ayurveda and other traditional sciences.