



Customary laws and protection of traditional ecological knowledge: A paradigm for tribals in India

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Abstract

The contemporary statutory state environmental laws have concentrated on two major paradigms- Access to Benefit Sharing (ABS) and Intellectual Property Rights (IPR) for advocating community rights over traditional knowledge. However, these models have been criticised by the legal anthropologists on two major grounds; firstly, it reflects western laws, secondly, there are gaps in their alignment with indigenous peoples' perspectives, needs and aspirations. Contrary to this approach, the present paper argues for Customary Laws (CL) in natural resource management as these are based on strong spiritual character and closely interlinked with belief systems, fundamental values of respect for nature, social equity and harmony. This paper also tries to examine the contemporary issues related to privatization of community knowledge, and comparison of ABS, IPR and customary laws to prove that CL model can be the only alternative to the existing laws in natural resource management.

Keywords: environmental laws, ABS, IPR, customary laws (CL)

Introduction

The twentieth century's high-modern, global discourse of development was dismissive of local knowledge, including knowledge of the environment and the rise in interest in indigenous knowledge in part a response to modernity's deskilling vision of and consequences for local communities (Scott, 1998). It is argued that indigenous peoples possess unique systems of knowledge that can serve as the basis for more successful development interventions (Brokensha *et al.* 1980) ^[1]. Thus, recently there is a growing recognition of the need to ensure that the rights of indigenous and local communities over their traditional knowledge are respected and protected. Two major issues have dominated the debate on relationship between indigenous communities and their environment; firstly, many indigenous and local communities are concerned about the privatization of their traditional knowledge and bio-resources and

secondly, alienation of their rights and unfair exploitation of these resources without permission or consent of the community (Reyes-Garcia *et al.*, 2007, Cocks, 2006) ^[6, 2].

Much of the interest in indigenous knowledge has focused on natural resources and the environment, which was reflected in the emergence of the concept of indigenous environmental knowledge. The emergence of this concept represented a reaction to the historical proliferation of discourses that largely and uncritically blamed local populations for environmental degradation (Table-1). Most of these discourses were driven by a neo-Malthusian view of population growth outstripping available resources, a view now widely critiqued for being overly simplistic and, in particular, ignoring overarching political-economic drivers (Ghai and Jessica, 1992) ^[3].

Table 1: Classification of Underlying Threats to Traditional Ecological Knowledge

Underlying Threats	Direct Threats influenced by the underlying threats	examples
Government policy and legislation (policy and legislation that devalue and/or suppress indigenous groups and their cultures)	Loss of pathways of TEK transmission	State government banning the use of native language in public schools causing the loss of traditional language and TEK carried by that language
	Change of traditional livelihood practices	A forced settlement policy changes nomadic herders' traditional livelihood practices
	Loss of traditional rights	Government claims state ownership of indigenous land
	Loss of traditional institutions	Government appointed leadership replaced traditional social hierarchy and leadership
Contact with other cultural groups (can be caused deliberately by non-indigenous groups or voluntarily by indigenous groups)	Loss of pathways of TEK transmission	Western TV programmes decrease young indigenous peoples' incentives and interests in traditional knowledge and culture
	Loss of traditional religion and beliefs	Christian missionaries impose or promote a change from traditional beliefs to Christianity
Influence of outside market (including the availability of modern goods, access to market)	Loss of pathways of TEK transmission	The availability of processed foods decreases incentives of learning and of using traditional knowledge to make own foods

and the possibility of engaging with trading activities)	Change of traditional livelihood practices	Market demand facilitates the shift from planting traditional crops to producing cash crops
Colonization (the establishment, maintenance, acquisition and expansion of HYPERLINK)	Loss of pathways of TEK transmission	Enforced western education system causes reduced TEK transmission
	Change of traditional livelihood practices	Enforced industrialization processes
	Loss of traditional religion and beliefs	Enforced or voluntarily change from traditional belief to colonizer's religion, such as Christianity
	Loss of traditional rights	Loss of traditional land ownership
	Loss of traditional institutions	Natural resource governance is controlled by the colonizers
Relocation (enforced or voluntarily)	Change of traditional livelihood practices	Agro-forestry groups are relocated from mountain areas to agricultural areas, and have to practice agricultural activities
	Loss of traditional rights	Indigenous people are removed from their land for mining activities
	Change of environment and natural resources	Pastoral groups move to agricultural areas as ecological refugees, and have to learn about a new environment and its resource use
Marginalization by dominant societies (including social, economic and political marginalization, which often leads to reduced self-esteem of indigenous population)	Loss of pathways of TEK transmission	Under social racism. Young indigenous people feel ashamed about their indigenous identity, and therefore make more effort to learn mainstream culture and skills instead of TEK
War and military occupation	Loss of traditional rights	Military occupation of indigenous lands
Indigenous population decline (including natural demographic decline or human made incidents, such as genocides)	Loss of pathways of TEK transmission	Elders pass away without transmitting their knowledge to younger generations
Migration (including indigenous emigration and non-indigenous immigration)	Loss of pathways of TEK transmission	Indigenous youngsters who move to urban areas for jobs have decreased incentives and interest in learning TEK
	Change of traditional livelihood practices	Indigenous people who move out from their traditional lands have to adapt their living to the new environment
	Change of traditional religions	Immigrants bring new religion into indigenous populations
	Loss of traditional rights	An increased number of outsider immigrants occupy the traditional land-base of indigenous populations
Economic development pressure (sustained and concerted actions that promote the standard of living and economic health of a specific area, usually driven by the dominant market economy)	Change of traditional livelihood practices	Urbanization changes traditional farmland into city, and converts traditional farmers into urban labourers

A number of international and national policy initiatives are seeking to respond to this challenge. The contemporary statutory state environmental laws have concentrated on two major paradigms- Access to Benefit Sharing (ABS) and Intellectual Property Rights (IPR) for advocating community rights over traditional knowledge. However, many people agree that existing intellectual property rights – such as patents, PVP, copyrights etc. are not suitable for protecting traditional knowledge as these are designed to protect commercial inventions and mostly grant individual and exclusive rights (Greaves, 1996; Posey and Dutfield, 1996) ^[4]. Contrary to these approaches, many argue for alternative 'sui generis' systems on the line of giving importance to traditional knowledge of the communities concerned as it is largely held collectively as ancestral heritage. For instance, when community members innovate within the traditional knowledge framework, they may use the patent system to protect their innovations. However, traditional knowledge as such - knowledge that has ancient roots and is often informal and oral - is not protected by conventional intellectual property systems. This has prompted some countries to develop their own *sui generis* (specific, special) systems for protecting traditional knowledge (WIPO, 2002) ^[11].

Intellectual Property Rights (IPR) and Access to Benefit Sharing (ABS) and protection of Traditional Knowledge (IK)

The contemporary statutory state environmental laws have concentrated on two major paradigms- Intellectual Property Rights (IPR) and Access to Benefit Sharing (ABS) for advocating community rights over traditional knowledge. The current international system of Intellectual Property Rights (IPR) for protecting intellectual property was fashioned during the age of industrialization in the West and developed subsequently in line with the perceived needs of technologically advanced societies. Two types of intellectual property protection are being sought; defensive protection and positive protection. Defensive protection aims to stop people outside the community from acquiring intellectual property rights over traditional knowledge. India, for example, has compiled a searchable database of traditional medicine that can be used as evidence of prior art by patent examiners when assessing patent applications. This followed a well-known case in which the US Patent and Trademark Office granted a patent (later revoked) for the use of turmeric to treat wounds, a property well known to traditional communities in India and documented in ancient Sanskrit texts. Defensive strategies might also be used to protect sacred cultural

manifestations, such as sacred symbols or words from being registered as trademarks. Positive protection is the granting of rights that empower communities to promote their traditional knowledge, control its uses and benefit from its commercial exploitation. Some uses of traditional knowledge can be protected through the existing intellectual property system, and a number of countries have also developed specific legislation. However, any specific protection afforded under national law may not hold for other countries, one reason why many indigenous and local communities as well as governments are pressing for an international legal instrument (WIPO, 2002) ^[11].

When protection of genetic resources is concerned, the Nagoya Protocol, a supplementary agreement to the Convention on Biological Diversity (CBD) advocates for conservation and protection of genetic resources of the biodiversity surrounding the indigenous communities' world-wide. This protocol was developed on 29 October 2010 in Nagoya, Japan and entered into force on 12 October 2014, 90 days after the deposit of the fiftieth instrument of ratification. Its major objective is to provide a transparent legal framework for the effective implementation of one of the three objectives of the CBD: the fair and equitable sharing of benefits arising out of the utilization of genetic resources, thereby contributing to the conservation and sustainable use of biodiversity. It argues that genetic resources themselves are not intellectual property (they are not creations of the human mind) and thus cannot be directly protected as intellectual property. However, inventions based on or developed using genetic resources (associated with traditional knowledge or not) may be patentable or protected by plant breeders' rights. This Protocol addresses traditional knowledge associated with genetic resources with provisions on access, benefit-sharing and compliance. It also addresses genetic resources where indigenous and local communities have the established right to grant access to them. Contracting Parties are to take measures to ensure these communities' prior informed consent, and fair and equitable benefit-sharing, keeping in mind community laws and procedures as well as customary use and exchange (Wan and Asma, 2013) ^[9].

The Nagoya Protocol gets legal assistance by the World Intellectual Property Organization (WIPO). WIPO's work on traditional knowledge addresses three distinct yet related areas: traditional knowledge in the strict sense (technical know-how, practices, skills, and innovations related to, say, biodiversity, agriculture or health); traditional cultural expressions/expressions of folklore (cultural manifestations such as music, art, designs, symbols and performances); and genetic resources (genetic material of actual or potential value found in plants, animals and micro-organisms). Along with International treaty on genetic resources for food and agriculture of the United Nation's Food and Agriculture Organization (FAO), it talks of two categories of conservation of genetic resources; defensive protection and disclosure requirements of genetic resources (Wan and Asma, 2013) ^[9].

Defensive protection of genetic resources strand of the work aims at preventing patents being granted over genetic resources and associated traditional knowledge which does not fulfil the existing requirements of novelty and inventiveness. In this context, to help patent examiners find relevant prior art, proposals have been made that genetic resources and traditional knowledge databases could help patent examiners avoid erroneous patents

and WIPO has improved its own search tools and patent classification systems. Disclosure requirements is that a number of countries have enacted domestic legislation putting into effect the CBD obligations that access to a country's genetic resources should depend on securing that country's prior informed consent and agreeing to fair and equitable benefit sharing. WIPO members are considering whether, and to what extent, the intellectual property system should be used to support and implement these obligations. Many, but not all, WIPO members want to make it mandatory for patent applications to show the source or origin of genetic resources, as well as evidence of prior informed consent and a benefit sharing agreement.

Although IPR and ABS are responsible international instruments to protect indigenous knowledge in environment, for many communities they raise different issues and may require different sets of solutions. Recently, many communities and governments have realised that the existing international intellectual property system does not fully protect traditional knowledge and traditional cultural expressions. For that, they have called for an international legal instrument providing *sui generis* protection. They argue that IPR and ABS would not work on two major issues; firstly, the conceptual issues and secondly, these are dominated by Eurocentric legal norms. An international legal instrument would define what is meant by traditional knowledge and traditional cultural expressions, who the rights holders would be, how competing claims by communities would be resolved, and what rights and exceptions ought to apply. Working out the details is complex and there are divergent views on the best ways forward, including whether intellectual property-type rights are appropriate for protecting traditional forms of innovation and creativity. WIPO is also responding to requests from communities and governments for practical assistance and technical advice to enable communities to make more effective use of existing intellectual property systems and participate more effectively in the IGC's negotiations. WIPO's is taking up the responsibility of assistance to develop and strengthen national and regional systems for the protection of traditional knowledge (policies, laws, information systems and practical tools) and the Creative Heritage Project which provides hands-on training for managing intellectual property rights and interests when documenting cultural heritage. On genetic resources, countries agree that intellectual property protection and the conservation of biodiversity should be mutually supportive, but differ on how this should be achieved and whether any changes to current intellectual property rules are necessary.

It is also argued that IPR regimes – such as patents and plant variety protection (PVP) – are becoming increasingly strong and ubiquitous as a result of trade agreements of the WTO and the proliferation of bilateral Free Trade Agreements. This is accelerating the commercial use and privatization of indigenous knowledge and resources. To overcome this problem, two major arguments are coming up; firstly, Parties to the Biodiversity Convention (CBD) and some patent offices are arguing for *sui generis* systems- a mechanism for sharing benefits with communities and secondly, one section feel that a completely different approach is needed, which responds to the distinct customary laws and worldviews of traditional knowledge holders. For them, the spread of IPRs is a significant concern because they clash with indigenous values of ancestral heritage and free sharing/open access which sustain livelihoods and

biodiversity; and because they undermine local control over resources and development pathways. There is a fear that IPRs will eventually replace these ‘commons’ values with private property values. If the less industrialized countries and communities are forced to accept IPRs from which they can derive little benefit, it seems only fair that industrialized countries should accept mechanisms to protect traditional knowledge based on customary laws. The international policy fora have recognized customary laws and practices as part of measures to protect traditional knowledge. There is however little understanding of what this means in practice.

Customary Law as alternative to Privatization of Community Knowledge

Contrary to the statute/state laws, which are written law emanating from a constituted political authority, customary law is a set of customs, practices and beliefs that are accepted as obligatory rules of conduct by indigenous peoples and local communities. Customary law forms an intrinsic part of their social and economic systems and way of life. These are recognized and shared collectively by a community, people, tribe, ethnic or religious group. Three major customary principles guide for the protection of indigenous knowledge related to natural resource; firstly, *reciprocity*: what is received has to be given back in equal measure. It encompasses the principle of equity, and provides the basis for exchanges between humans, and with Mother Earth; secondly, *duality*: everything has an opposite which complements it; behaviour cannot be individualistic; and *equilibrium*: refers to balance and harmony, in both nature and society - ex. respect for the nature, and resolving conflicts. Equilibrium needs to be observed in applying customary laws, all of which are essentially derived from this principle (WIPO, 1999)^[10]. These principles are also recognized by the international bodies involved with protection of indigenous knowledge. For instance, in recent years, indigenous peoples, local communities, and governments, mainly in developing countries, have demanded equivalent protection for traditional knowledge systems.

In 2000, member of WIPO established an Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC), and in 2009 they agreed to develop an international legal instrument (or instruments) that would give traditional knowledge, genetic resources and traditional cultural expressions (folklore) effective protection. Such an instrument could range from a recommendation to WIPO members to a formal treaty that would bind countries choosing to ratify it. The FAO Treaty on Plant Genetic Resources for Food and Agriculture has also adopted the CBD’s ABS framework. As with the CBD, it separates genetic resources from the customary laws of indigenous communities that govern their access and use, and ensure continued access to these resources for food security, health, poverty reduction and cultural and spiritual life.

There are three major arguments in favour of customary laws for protection of indigenous knowledge. Firstly, it is said that traditional knowledge is not so-called because of its antiquity. It is a living body of knowledge that is developed, sustained and passed on from generation to generation within a community, often forming part of its cultural or spiritual identity. As such, it is not easily protected by the current intellectual property system,

which typically grants protection for a limited period to inventions and original works by named individuals or companies. Its living nature also means that “traditional” knowledge is not easy to define. Secondly, recognizing traditional forms of creativity and innovation as protectable intellectual property would be an historic shift in international law, enabling indigenous and local communities as well as governments to have a say over the use of their traditional knowledge by others. This would make it possible, for example, to protect traditional remedies and indigenous art and music against misappropriation, and enable communities to control and benefit collectively from their commercial exploitation. United Nations agencies working on the protection, preservation and promotion of traditional knowledge also observed gaps in their alignment with indigenous peoples’ perspectives, needs and aspirations. Since, they address traditional knowledge separately from traditional resources and territories and customary laws, deal with TK issues within a paradigm of property, and marginalize the ancestral rights-holders from decision-making. Thirdly, the customary law as a paradigm has several advantages than the ABS framework for natural resource management and protection of indigenous knowledge.

1. The ABS framework recognizes the sovereign rights of states over natural resources and the authority of states to decide over the use of genetic resources. Although the principle of national sovereignty is important in promoting equitable benefit-sharing between countries, it is generally interpreted as government *ownership*, with the rights of other actors, notably indigenous and local communities, often unclear or un-recognized. The CBD only requires the Prior Informed Consent (PIC) of State Parties for access to genetic resources, and not of indigenous and local communities. Thus, it separates rights over natural and genetic resources, which are ‘owned’ by the state, and rights to traditional knowledge which are ‘owned’ by indigenous and local communities. Although some national ABS laws require PIC of communities for access to TK, few require their PIC for access to bio-genetic resources, thereby undermining the rights of local custodians, particularly given the obligation on States to facilitate access to genetic resources. The ABS framework effectively facilitates access by outsiders to community resources, as opposed to facilitating access by communities to ex-situ resources, many of which originate from their traditional territories. Addressing customary laws and traditional resource rights in this framework would imply a requirement for PIC of indigenous communities for use of bio-genetic resources collected from their territories, a reciprocal or two-way access framework which also facilitates access by communities, and an emphasis on safeguarding access to resources for customary use by communities.
2. The World Intellectual Property Organization (WIPO) has developed useful guiding principles for developing for the Protection of Traditional Knowledge. However, being situated within an IPR body, and composed mainly of representatives from national patent offices, its work has a distinct leaning towards IPR models. Essentially, it promotes intellectual property solutions, which separate traditional knowledge from the cultural and spiritual values that establish its collective ownership. Even though the

recognition of customary laws is amongst the issues being discussed, a number of parties continue to emphasize the need for protection of traditional knowledge to be consistent with IPR standards.

3. Rather than being commercially-oriented, customary laws often have a strong spiritual character, being closely interlinked with belief systems associated with natural resources and landscapes. They are often based on fundamental values of respect for nature or mother Earth, social equity and harmony, and serving the common good. Traditional knowledge and resources are seen as collective ancestral heritage which no individual can own as they are believed to come from God.

Conclusion

The Management of natural resources has been a political norm, assisted by the dominant jurisprudence of the state. The international agencies as well as the national governments are advocating for IPR and ABS system to protect indigenous knowledge in environment. But many indigenous communities and organizations have realised that the existing international intellectual property system does not fully protect traditional knowledge and traditional cultural expressions, because of lack of conceptual clarifications and dictated by the Eurocentric legal norms. Contrary to it, there is the demand for argument in favour of an international legal instrument providing *sui generis* protection. There is the need to recognise the rights of indigenous and local communities to own and decide over these resources on the line of international human rights law and the ILO Convention 169. *Sui generis* systems should therefore be consistent with indigenous and human rights instruments, and not only with the CBD and ABS regimes, so that the rights of indigenous and local communities over their bio-genetic resources are also recognised. Customary law as an alternative to ABS and IPR has three major principles or values – such as Equilibrium, Duality and Reciprocity is the need of the time to form the basis for *sui generis* systems at all levels. Given that TK and genetic resources are often shared freely between communities, even across borders, the need for collective rights, collective decision-making and benefit-sharing amongst neighbouring communities should be recognised. The international instrument on Access and Benefit-Sharing should fully recognise and protect the rights of indigenous and local communities to their knowledge, genetic resources and territories, and be developed and administered in close collaboration with them, rather than being a government-centric framework where communities loose out. The current process needs to be broadened to enable representatives of indigenous and local communities to participate fully in the decision-making process.

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