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CAPITALIZATION OF INDIGENOUS KNOWLEDGE IN THIS GLOBAL EPOCH: ENCROACHING THE RIGHT OF THE INDIGENOUS POPULATION

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ABSTRACT

Globalization has reduced the effects of distance to an extent that even the remotest corners of the earth are interconnected with the rest of the world which has given rise to an immense compendium of information at the disposal of individuals who seek it out. Indigenous knowledge forms a part of this system which is often being used by corporate entities and research groups who reap immense commercial benefits without sharing it with the native owners of the information. This article seeks to discuss the relationship between indigenous knowledge and the existing framework of Intellectual Property Rights and the growing application and use of indigenous knowledge in the mainstream. The limited recognition that is accorded to indigenous knowledge under IPR often results in exploitation of native communities and the bio-diversity of their lands. The analysis of important hurdles that inhibit the incorporation of indigenous knowledge under IPR partially violates the rights of the natives and their cultural identity which has been elucidated with the help of established judgments and principles propounded by legal luminaries. This article also explores some of the major differences with respects to existing standardized norms in the field of IPR which need to be reconciled to ensure recognition.

Keywords: *Globalization, indigenous knowledge, IPR, bio-diversity, exploitation*

As globalization blurs the distance between the remotest corners of the earth, indigenous knowledge with mainstream applications can become a subject of dispute between the corporate entities who wish to capitalize and the natives for whom this knowledge and its application forms an integral part of their lives. While the involvement of commercial industries can aid in recognition and conservation of these unique native resources it can also spell doom for the

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indigenous population when such industries seek to monopolize such assets to sever the claims of the indigenous people over these assets. The traditional Knowledge which can range from a variety of fields is usually developed over a large span of time and forms an integral part of the culture of the indigenous people and their customs so much so that separating this knowledge from their society would result in a loss of a major part of their identity as well.[2] Many issues still persist in the field of Intellectual Property Rights when it comes to protecting the rights of the indigenous population and compensating them for the development and research of processes and products which utilize indigenous knowledge.

Indigenous Knowledge also known as traditional knowledge is said to be possessed by the natives of a distinct territory who identify themselves to be disparate from the non-native population in terms of culture, heritage and other deciding factors unique to their territory. In order to equate indigenous knowledge with its morphed variation that is commonly known as intellectual capital, it is important to observe that in both cases the actual ownership is quite ambiguous and it is dynamic in nature just like Intellectual Capital and keeps evolving with new discoveries and additions. The dissemination of indigenous knowledge and its application are relation based, and it moves within the native community, untethered by formalistic legal principles and norms. And despite all these similarities of indigenous knowledge with the characteristics of intellectual capital, intellectual capital itself is not an exhaustive concept with ample avenue for loopholes and therefore the attempts to assimilate indigenous knowledge with this concept is not practicable.

COMMERCIAL VALUE OF INDIGENOUS KNOWLEDGE

The use and application of plants in traditional medicine is the main reason why researchers and developers pursue their work incorporating such plants in the first place, a study also shows that around 74% of all drugs that require plant by-products and extracts have an established position in traditional medicine.[3] There has been significant development in the field of Intellectual Property rights to incorporate mechanisms to ensure that the rights and contributions of the indigenous people and their knowledge are protected and adequately compensated. But the non-monetary aspects attached to their contribution receives little to no attention at all as this would

[2] Vol.2, John Cordell, Traditional Ecological Knowledge: Wisdom for sustainable development, (1st ed., Nancy M. Williams & Graham Baines, 1995)
[3]Vol.95, Stephen B. Brush, Indigenous Knowledge of Biological Resources and Intellectual Property Rights: The Role of Anthropology 653-686 (3rd ed., 1993)

include non-industrial or non-commercial aspects which also ultimately lead to the implication of monetary benefits. But the system of IPR including, trademarks, copyrights, trade secrets and other instruments have been tailored specifically to suit the interests of the western capitalist ideals and this present mechanism is inhibiting the indigenous people from claiming their share of the benefits for the system of knowledge that they and their ancestors developed.

Issues with respect to commercial application

It can be argued that Bio prospecting which means the research and development undertaken to discover new biological and genetic material from the for use in products and process for a commercial application is another form of oppression that is being legalized by IPR. The present statutes and provisions only concentrate on the safeguards for commercial exploitation, and compensation is not considered as an integral part of the process but a contingent antecedent of the commercial success. Institutions rarely ever account for the non-monetary and personal benefits they receive as a result of the application of indigenous knowledge so it is very hard, in reality, to impose direct liability on them to compensate the natives for their contribution. This issue is also marred with ethical concerns as the natives who develop these systems over the ages do not receive their dues and the capitalists have been profiteering off their knowledge by utilizing the loopholes that the existing system accords them.[4]

For the system of knowledge that has been developed over a large span of time by the natives and their ancestors, they are entitled to reap the benefits of these assets, they should be entitled to the non-monetary and monetary benefits resulting from its application, they deserve due credit for their knowledge and moral rights over its use along with an option to participate in the research and development of the indigenous knowledge. These concepts are integral and should be incorporated in all facets and avenues of statutes to establish an effective system to ensure accountability of all commercial ventures and research work. The Kuna women of Panama are famed for their production of 'Molas', which was also a major source of their income, and with the help of locally organized groups, they have effectively grabbed their due by policing the non-native producers of 'Molas'.[5] According to estimates, the application of indigenous knowledge in the pharmaceutical and agricultural sector generates billions in revenue through the application of indigenous knowledge, but it is still astounding to observe that in practice indigenous

[4] Vol.56, FSI &Brij Kothari, Rights to benefit of Research: Compensating Indigenous people for the intellectual contribution 127-137 (2nd ed., 1997)

[5]Alcida Rita Ramos, Commodification of the Indian 268 (Darrel Addison Posey & Michael J. Balick, 2006)

knowledge is being excluded from the disciplines of IPR and Property rights based on the grounds that it is property commons which is not recognized under the aforementioned fields of law.[6]

The ultimate objective of Intellectual Property Rights should not only be limited to safeguarding knowledge but also to grant recognition and protection to the rights of all individuals and groups contributing their knowledge. Institutions and researchers partake in bio-piracy in the search of new genetic material for their work and the main victim of such acts are the unsuspecting natives of indigenous knowledge, and such institutions and organizations that use the knowledge of the native community without their express assent violate the norms of the community and their right of dissemination of such knowledge.[7] It has been observed that indigenous knowledge forms, a very central theme of the culture of the native population and as such forms a very important part of their unique identity, like the Zunis people from Africa believe that the crops that they grow are sacred blessings from their god, and violating this integral aspect of their culture and their autonomous right to disseminate this knowledge can be interpreted as impudent.

Consequences of Capitalization

The Hoodia plant is a species of cactus that has been used by the San people, natives of a region in South Africa who are hunter-gatherers, and this cactus has very special properties that suppress hunger and is very useful for the natives on their long hunting expeditions, but this knowledge was used by a research group in South Africa without the consent of the natives to develop a weight-loss drug which was subsequently sold to Pfizer organization for a huge sum of 21 million dollars.[8] The unaware San people only received a modest compensation system after there was significant international outrage and the social organizations compelled the bio-pirates to compensate the San people. This incident effectively portrays how the rights of the San people were stripped from them with the malefactors suffering negligent ramifications for their actions, the San people lost the opportunity to gain benefits from their indigenous knowledge which their community had held onto for years.

SHORTCOMINGS OF THE EXISTING LEGAL FRAMEWORK

[6] Carla Cuardo& Nick Bontis, The knowledge-based view of the firm and its theoretical precursor 133-148 (R.M. Grant, 2006)

[7]Vol.6, MarcelinMahopTonye& M. Mayet, En route to bio-piracy?Ethnobotanical research on anti-diabetic medicinal plants in Eastern Cape Province, South Africa 2946-2951 (25th ed., 2007)

[8] Vol.479, Rebecca M. Bratspies, Some Thoughts on the American approach to genetically modified organisms 393-423 (3rd ed., 2007)

It is quite evident that the lax framework of western intellectual property has opened the avenue for western countries to perdure their imperialistic past in the modern world too allowing them to exploit traditional knowledge without indemnifying the natives. This practice of poaching oriental traditional knowledge for commercial application has been quite prevalent among the western states, like in the case of turmeric which is another herb that possesses special intrinsic value for the Asian countries including India where it is used for its medicinal properties with ample evidence in the historic Ayurvedic texts. But in 1995 scientists from the U.S. acquired a patent by employing traditional knowledge regarding turmeric, even though the medicinal and wound healing properties of turmeric are not novel in nature. The same practice was observed in the case of 'basmati rice', wherein this specific genus which was endemic to India and Pakistan was being appropriated by a U.S. company RiceTec to grow this rice in northern America in order to qualify for a utility patent. Even though the claims with respect to turmeric were invalidated along with Ricetec's claims to a certain extent with the help of governmental and social activism, is quite evident that without proper reforms indigenous knowledge runs the risk of being exploited by the loopholes of intellectual property statutes.

Intellectual Property has been structured according to western ideals and norms focusing more on the rights of individuals and modern industries and institutions while disregarding the needs of communities and their contributions with respect to indigenous knowledge.[9] Integral ethical issues related to indigenous knowledge with reference to IPR are being disregarded due to the fact that the existing mechanism lays more emphasis on individual and institutional claims based on subjective grounds which overshadows the need for recognition of indigenous knowledge in the legal system. Subject matter for several IPR statutes like Trade secrets, Patents and Copyright mainly concentrates on individual effort rather than the work itself as can be seen in U.S. and English laws, the established principle protects all works that have been produced as a result of independent creation which if proved disregards the need to prove the uniqueness of the product. This common principle illustrates that currently, the main focus of the law is to protect the interests of the creator with reference to the source rather than the finished product itself.

NEED FOR REFORMATION OF THE EXISTING SYSTEM

The initiative taken by western institutions, companies and local social groups to facilitate and promote activism regarding the exploitation of indigenous knowledge has been met with harsh

9 Vol.22, Antonio Ramírez et al., Knowledge Creation, Organizational Learning and Their Effects on Organizational Performance 309-318 (3rd ed., 2011)

criticisms by scholars as being inadequate. It is quite apparent that local patent granting authorities who are unfamiliar with the indigenous knowledge might not be able to gauge its importance even with careful examination but social groups and activists might raise the issue for recognition of indigenous knowledge more effectively.[10] Numerous activists at local and international level have been lobbying to acquire protection against commercial exploitation for indigenous knowledge. Emerging economies and developing countries have also laid down great stress on formulating a systematic mechanism to secure their indigenous knowledge and interests associated with it.[11] It was expressed by many Indigenous leaders in WIPO that the indigenous knowledge that they possess is very unique to the territory they occupy in the sense that this knowledge enables them to effectively sustain themselves and manage the environment and as such is an integral part of their culture and identity and hence it cannot be commercialized similar to other goods in the economy.

The role of Government and NGOs

Government and NGOs also play a very important role in the formation of an appropriate mechanism by influencing national and international agreements and treaties. Like the adoption of specific legislation by India and Africa that provides for sharing of monetary and commercial advantages with the source of indigenous knowledge and using such knowledge with the prior consent of the communities. Such achievements are possible due to the proactive approach of governments and involved individuals to secure their indigenous knowledge. But these safeguards might also prevent such knowledge from being used to benefit the society at large as without the proper knowledge natives might be apprehensive to share their knowledge even when there are considerable gains to be achieved, and such apprehensiveness and protest might dissuade commercial organizations from pursuing further to apply indigenous knowledge into the mainstream. And this was also observed in India, where a group of social activists and farmers were protesting commercial institutions who were seeking to commercialize the indigenous knowledge.

Development of Indigenous Knowledge and its recognition

[10]J. Michael Finger & Philip Schuler, Poor People's Knowledge: Promoting Intellectual Property in developing countries (World Bank, 2013)

[11] Intergovernmental committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore-12th session, WIPO (Oct.13, 2020, 6:37 PM), https://www.wipo.int/edocs/pubdocs/en/general/1007/wipo_pub_1007.pdf

It is also very important to understand that indigenous knowledge does not always mean an archaic system of knowledge but rather it is constantly evolving and changing with new discoveries and innovation, and all claims made to marginalize the natives by discrediting their knowledge is done for exploitation and commercial application.[12] The system of knowledge is closely affiliated to its actual application, like practices that are no longer practised or are being practised in a different way by incorporating modern methods does not discredit the original knowledge system and it is merely an alteration made by natives to their existing system to adapt to the changing circumstances. It is very important to understand that indigenous knowledge does not always comprise of antiquated knowledge but it is an amalgamation of new and old observations and discoveries that are made by natives while interacting with their environment, foreign elements and society.

Given the current understanding of indigenous knowledge, it is still very hard to resolve all the issues that arise while trying to incorporate and standardization of its various facets to effectively bring about policy reforms. The intangible nature of indigenous knowledge that is connected to the heritage and the territory of the natives and their rights presents a lack of clarity regarding the subject and to resolve this issue further analysis is required to gauge the claims of the natives regarding the distribution of rights and ownership when it comes to biological product, process and resources. Under the system of IPR to gain protection and special benefits one must show that through the application of intellectual and creative attempts the product has been made in a significantly altered from its naturally occurring state, but this same premise cannot be applied in case of indigenous knowledge because natives usually use a resource in their natural forms without any significant alterations and thus it does not qualify for protection under IPR. The case of Mabo and Orsvs State of Queensland discussed the above-mentioned issue with reference to patents, J. Brenan stated that native title gains its validity from traditional laws and customs that are ratified by the inhabitants of that territory by express recognition and thus to determine the nature and application of such title should be done while referring to the traditional laws and customs.[13]

Traditional knowledge and its relation to native property rights

[12] Eugene Hunn, Traditional Ecological Knowledge:wisdom for sustainable development 13-15 (Nancy M. Williams & Graham Baines, 1993)

[13]Mabo and Ors v State of Queensland, 175 CLR 1 (HCA. 1992)

However, it still remains an unresolved issue when it comes to deciding whether native property rights also include those rights that relate to indigenous traditional knowledge because in case of property, possession is enough to establish ownership but in case of traditional knowledge it is very hard to establish rights since it is very abstract in nature.[14] It has been proposed that the continued practice of indigenous knowledge could also be used to prove the continued connection to the land and their cultural identity which can be equated to establish continued possession. A similar theory was suggested by D. Bennett who argued that the practice and recognition of indigenous knowledge could be interpreted as under intellectual property rights to establish it as a native title. Since it has been observed that the definition of native title includes all customary norms traditions of the natives so it can be inferred that this stance could also provide indigenous knowledge sanction as a form intellectual property since indigenous knowledge forms an essential aspect of their cultural identity and customary laws.[15] The activities of native people practised on their land with regards to their indigenous knowledge illustrates how they express and apply this knowledge which provides valuable insight into indigenous knowledge wherein if it is proved to be a part of native title the implied presumption would automatically classify indigenous knowledge as part of Intellectual property.[16] But it is still very unclear that whether the system of knowledge is connected with the land and its associated rights.[17]

The case of Ben Ward vs. State of Western Australia discusses this issue in detail regarding the implication of property rights in traditional and biological knowledge, the court propounded a set of principles in relation to the rights of Miriuwung and Gajerrong over their territory, while laying special emphasis to their right of maintaining and preventing exploitation of their tradition knowledge that flows from their territory.[18] Courts have been giving recognition to the rights of native groups within the existing framework of intellectual property right with regard to the use and application of their indigenous or traditional knowledge. And the system of indigenous knowledge has been developed to adapt and survive to their existing environment and it is a connection to their territory and cultural identity. For example the Neem tree holds a very special position in Indian scriptures as a medicinal herb and has been used for over a very long time and

[14] G. Mclntyre, Proving Native Title 129-131 (R.H. Bartlett & G.D. Meyers, 1994)
[15] David Bennett, Native Title and Intellectual Property (P. Burke, 1996)
[16] Bennett, supra, 13.
[17] Vol.16, D. Sweeny, Fishing, Hunting and Gathering rights of Aboriginal peoples in Australia 103 (1st ed., 1999)
[18] Ben Ward on Behalf of the Miriuwung and Gajerrong people v State of Western Australia and Ors, 1478 AILR 59 (FCA. 1999)

yet multiple patents have been permitted in U.S. and Europe by allowing a scheme of exclusion to discredit the knowledge possessed by the natives and their claims over it. And even though the knowledge regarding the use of the Neem extracts has become common knowledge in the public domain through the course of time, it still holds cultural significance for the Indian people, and the western institutions have unjustly used this information claiming it to be novel in nature. And even though the patent claims in Europe were nullified through the work of activists, the ones in U.S. sustained and it should be the duty of the native country to safeguard its traditional knowledge and bio-diversity and take necessary actions to prevent its exploitation.

CONCLUSION

The ethical considerations regarding the recognition of indigenous knowledge have been observed to be quite similar to other forms of IPR, like copyright, the justifications for indigenous knowledge also focuses on the authorship and development. The various attempts to incorporate indigenous knowledge as another form IPR concentrates mostly on the protection of autonomy and cultural identity of the natives. The fundamental distinction that can be made between indigenous knowledge rights and the western-oriented intellectual property rights is that indigenous knowledge requires respect and protection for the native communities and western IPR concentrates on individuals, formal institutions and commercialization of work. This is the main impediment in the path to recognizing indigenous knowledge as IPR since several characteristics of indigenous knowledge are obverse to the standardized norms fixed according to western laws. The main concern is that indigenous knowledge which has great intrinsic value and is mainly possessed by native communities from emerging economies making them more prone to exploitation with an absence of proper safeguards to regulate its use and application. The participation of the indigenous community with respect to their contribution with their cultural heritage and knowledge is integral for the overall development of society and it is the duty of the international community and the States to develop effective mechanisms to protect the natives as well as their knowledge.