PROTECTING TRADITIONAL KNOWLEDGE/SECRETS UNDER INTELLECTUAL PROPERTY LAW: A COMPARATIVE ANALYSIS OF THE ADEQUACY OF PROTECTIONS USING NIGERIA AS A CASE STUDY

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Abstract

The adequacy of protection of the Traditional knowledge of a people must be viewed not merely as protection of intellectual property rights but the protection of the very existence of a people; as if that knowledge or invention sought to be protected is their very being and identity. The economic aspect of protection under intellectual property law should be viewed as secondary. Whereas this discourse is focused on aspects of intellectual property, much emphasis needs to be laid and taken into consideration while drafting legislation to ensure that traditional knowledge rights of a people are protected not only from the economic standpoint but from a self determination and human rights point of view. These traditional practices, healing techniques etc are long practiced ways of life that become a people's very being and existence. Therefore any attempt in remodeling/rebranding these techniques and making profits from them means robbing a people of their very existence. It follows then that incidents of bio-piracy should be likened to the crime of genocide (eroding the very existence of a people) and adequate punitive measures capable of enforcement should be put in place when making draft legislation. Ethical Clearance must be secured from the relevant regulatory agencies before any form of inquiry, investigations, and/or interviews are embarked upon.

Key Words: *Traditional knowledge, human and peoples' rights, intellectual property law, bio-piracy, ethical clearance*

1. Definition and Scope of Traditional Knowledge

Till date, there is no clear definition of what traditional knowledge is. Even the Convention on Biological Diversity avoids trying to define Traditional Knowledge[2].

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[2] G. Dutfield; Developing and Implementing National Systems for Protecting Traditional Knowledge: "A Reveiew of Experiences in selected Developing Countries". Global Intellectual Property Law Journal (2002)

However, Traditional Knowledge includes traditional and traditional based literary, artistic, and scientific works, performances, inventions, scientific discoveries, designs, marks, names, symbols, undisclosed information and all other innovations and creations resulting from intellectual activity in the industrial, scientific, literary or artistic fields.[3]

As a result of either consistent performing of an act or by happenstance, a novel invention occurs that aids a particular set of people to solve a need in their environment; which prior to such invention, there existed a social or biological need. The novelty and uniqueness of the problem solving idea is what is termed as traditional knowledge. The custodian of this unique knowledge, most times are locals and may not have the wherewithal to either publicize or develop their inventions. This limitation makes their inventions of little or of no impact within the society. The concept of bio-piracy which will be explained further in this work and will elucidate on the limitations faced by traditional knowledge holders and the exploitation of bio-pirates that are majorly multi-nationals and big corporations who steal these novel and unique inventions, develop them and make profits from them. The absence of applicable models to equitably compensate all stakeholders (traditional knowledge owners inclusive) will be the major basis of this thesis using Nigeria`s regulatory approach as a case study.

1.1 Folklore Classified as Traditional Knowledge

The Ghanaian Copy right Law included scientific knowledge to mean folklore thereby widening the scope of Traditional Knowledge. [4] Some scholars have also tried to distinguish folklore from traditional Knowledge by saying that folklore suggests creative works for which copyright may be appropriate protection while Traditional Knowledge can be likened to an industrial property and has some commercial value

Proponents of Traditional Knowledge representing developing states, which in most cases are the source of most Traditional knowledge are of the view that the word folklore has a negative connotation of being associated with the creations of lower or superseded civilizations, and have suggested that folklore should include Traditional (Scientific) Knowledge. [5]

[3]CoenraadVisser, "Some Thoughts on making IP work for TK". South African Mercantile Law Journal, 656 (2002)
[4]Ghana Copyright Act of 1985.
[5]The Law and Policy of protecting folklore, Traditional Knowledge and genetic resources.Fordham Intellectual Property media and entertainment Law. Pg. 753-804.

1.2 Use of Plants and Herbs Classisfied as Traditional Knowledge in Pharmaceuticals

The World Intellectual Property Organization (WIPO) included medicinal use of plants and environmental and bio-diversity conservation related knowledge, such as knowledge of grass species, grazing and animal tracking systems, weather patterns, knowledge relating to preservation and use of natural and genetic resources, farming and agricultural methods, hunting skills, divine worship and spiritual aspects of healing to define traditional knowledge [6].

From the above, it can be deduced that there is no definition of what Traditional Knowledge means and its scope is wider than imagined.

2. Undue Exploitation of Traditional Knowledge and Bio-Piracy

The general practice is that indigenous communities though the inventions of traditional knowledge are not rewarded appropriately for the exploitation of their traditional knowledge, perhaps due to the deliberate refusal of exploiters to pay and difficulties in identifying the proper owners to whom payment is to be made.[7] A typical example of the above assertion is the case of an European Composer who made lots of gain from a composed African work which he registered as his work in Europe without compensating the community form which the folklore originated.[8]

Medicinal plant research now focuses on the tropical rain forests because most of the Western drugs are made from substances found in these areas. The discovery of the tumor fighting capabilities of the Madagascar`s Periwinkle which has been patented by a Western Pharmaceutical nets the company $100, 000, 00 (One Hundred Thousand Dollars). Eighty eight percent of the proceed goes to the company as profit and the indigenous people of Madagascar who were using the plant for similar ailments got nothing despite the exploitation of their traditional knowledge.[9]

The Commercial or mass production of traditional Knowledge over time extinct the traditional skills, currently there is an unfolding controversy swirling around a Two Meter, Eight tone sculptures with the title "Wadjina Watchers in the Whispering Stone". Indigenous Wadjina tribesmen are furious that the artist did not seek

[6]WIPO (Intellectual Property Needs and Expectations of Traditional Holders) (1998-1999) pg. 146.
[7] P. Kuruk "The role of customary law under sui generis frameworks of intellectual property rights in Traditional and Indigenous Knowledge". American University Law Review Vol. 48 Issue 4 (1999)
[8] B. Ndoye, "Protection of Expression of folklore in Senegal" , WIPO 25th Copyright Monthly Review 374, 375 (1989)
[9] A.B Cunnigham, "Indigenous Knowledge and Biodiversity: Global Commons or Regional Heritage"? Cultural Survival (Summer 1991) pg 4,6.

permission before using what they regard as sacred imagery. Both Sides are now mounting a battle.[10]

From the above instances, one can say that an appropriate protection for Traditional Knowledge is needed to ensure that the indigenous people are not exploited.

2.1 The Concept of Bio-Piracy

Bio piracy is a term of accusation rather than a term of law. It is the misappropriation of biological resources of Traditional Knowledge through the patent system. It can be seen as the patenting of a new use of an old drug (Traditional Herb).[11]
Big corporations, without proper authorization gain access to genetic resources and traditional knowledge of indigenous people. This traditional knowledge is then developed, rebranded and patented.[12]

The most popular case of bio-piracy is the Turmeric case. Turmeric a long spice long used in India as a flavoring and colorant in food as well as an ingredient in medicines and cosmetic which has a long history of uses in traditional medicine in many regions including India. In 1995, the US patents office granted patent No. 5,401,504 for use of powdered Turmeric to speed healing of wounds. This patent was assigned to The University of Mississippi Medical Center. This above example is a typical case of Bio-Piracy. Since 1976, The USPTO has issued 255 patent based on properties of Neem tree and 580 based on the Turmeric plant.[13]
A lot of academic debate is ongoing on the existence of bio-piracy but once unauthorized access, use, ownership claiming and commercialization of Traditional Knowledge conflicts with the customary laws of the source community, then, Bio-Piracy is occurring.[14]

3. Why protect traditional knowledge?

While the original inventors of what may today be termed as Traditional knowledge had no intention of having any sort of protection as such inventions were for the common good of the community, there is an urgent need today for jurisdictions to

[10] Wading into the Wadjina controversy available on http://www.abc.net.av/rn/lawreport/stories/2010/2939168.htm
[11] Prof. G. Dutfeild : " A critical analysis on the debate on Traditional Knowledge, Drug Discovery and patent based biopiracy". Global Intellectual Property Law and Policy Vol 33, Issue No. 4, pp238-244 (2011)
[12] G. Dutfield and U. Suthersanen "Intellectual Property, Bio Genetic resources and Traditional Knowledge" Prometheus Vol. 23, No.2 131-147 (2005-2006)
[13] D Marinova& M Raven, "Journal of Economic Surveys", (2006.)
[14] "Global Intellectual Property Law" ibid.

develop regulations and legislations to protect traditional knowledge, bearing in mind the unlawful acts by multinationals and big corporations that amount to bio-piracy.
Rhetoric: Local herbalists that engage in series of processes like identifying a particular area of land where a plant species was dominant, identifying a particular leaf or specie, knowing the appropriate mixture for such leaf, the boiling temperature and the quantity that heals a particular ailment would not be said to be a mere stumbling upon "*natures gift*" as most proponents of contemporary IP regimes might argue. These laid down processes are termed Traditional Knowledge and needs some form of protection or documentation. Exploitation of this knowledge is not identifying the particular healing plant that is termed *"nature's gift*", but stealing/rebranding of the series of processes engaged by the herbalist who have over a long period of time perfected his trade. These reasons have motivated developing countries to develop bodies and laws to protect their Traditional Knowledge.

3.1 Reasons for Protecting Traditional Knowledge

a. Traditional Knowledge improves the livelihoods of its holders and the community as a whole. For years the Xhomani San (bushman) people of the Kalahari Desert have been eating the Hoodia plant to fight hunger and thirst. The South African Council for Scientific and Industrial Research (CSIR) learnt about the Xhomani people`s use of the plant and researched on it to invent a pill that can suppress appetite. The CSIR has hopes that the invention will help reduce obesity in the developed world and its sale will generate millions of dollars. The Xhomani people have been excluded from all financial agreements to seal the deal. Widespread criticism has made the CSIR agreeing to share the profits with the Xhomani people which will improve their livelihood.[15]

b. Protecting Traditional Knowledge conserves the environment: Natural resources which are most times the sources of Traditional knowledge, if protected will reduce the undue exploitation and unauthorized access to natural resources.

c. It will encourage innovation by the indigenous people once they see that a Traditional right holder who has invented something has made some gains from such invention, it will encourage other members of the indigenous community to engage in research in their vast natural resources and make new inventions.

d. It prevents Bio-piracy.

[15] G. Dutfield "Protecting Traditional Knowledge and Folkore": A review of Progress in diplomacy and policy formulation. UNCTAD –ICTSD Project on IPR`s and Sustainable Development, (June 2003)

3.2 Challenges of Protecting Traditional Knowledge Rights Under The Conventional Intellectual Property Laws

Protecting Traditional Knowledge under the modern intellectual property laws will be very difficult taking into consideration the nature and scope of traditional Knowledge. Some major obstacles have been identified as reasons why protection will be cumbersome.

a. Classifying innovations of Traditional Knowledge into categories of intellectual property will be difficult. Traditional knowledge cuts across cultural, business, religious, intellectual and physical spheres and are not as distinct or mutually exclusive.[16]

b. Intellectual Property rights are a legal mechanism to encourage innovation. These rights are granted to a defined individual or group of individuals identified as the inventor or creator, although they are transferrable by gift or sale. Traditional Knowledge on the other hand is handed down from generation to generation and have no clearly identifiable individual inventor thus making it unsuitable for Intellectual property rights to protect since there is no provision under Intellectual Property Rights for collective rights.[17]

c. Proponents on the protection of Traditional Knowledge have placed more emphasis on the protection of customary and traditional values instead of economic or financial incentives that is protected under the intellectual property laws.

d. The duration of Traditional Knowledge held by indigenous people is limitless as compared to copyrights or patents grants that are within a period of time.[18]

3.3 Positive and Defensive Models of Protection Discussed

In a bid to protect Traditional Knowledge, two categories of protection have emerged. The models of protection are "Positive protection" and "Defensive protection".[19]

[16] P. Kuruk "Protecting folklore under Modern Intellectual Property Regimes: A reappraisal of the Tensions between individual and communal rights in Africa and the United States". American University Law Review Vol. 48 Issue 4, (1999)
[17] D. Downes "How intellectual property could be a tool to protect traditional knowledge".Columbia Journal of Environmental Law Vol. 25, pp 253-282 (2000)
[18] R. Coombe "The recognition of Indigenous Peoples and Community Traditional Knowledge in International Law". Pg 311.
[19]Ibid.

Positive protection is a scenario where the Traditional Knowledge holders acquire rights over their knowledge, such right if not granted under the contemporary Intellectual property Laws is granted in a special law also known as the Sui Generis law. This form of protection has been recommended by WIPO to member states to enact sui generis laws within their jurisdiction to protect their Traditional Knowledge as will be discussed in the final part of this work.

Defensive Protection on the other hand are provisions in a law that prevents claims by unauthorized persons who try to patent traditional knowledge without the consent from the indigenous people. It prevents misappropriation. This is not a holistic approach per se, as seen in the positive type of protection but certain provisions in a regulation, convention or legislations tend to verify claims by persons who may want to register a Traditional Knowledge without authorization and access. An example of this type of protection is Article 8(j) of the Convention on Bio- diversity.
Article 8 (j) conventions on Bio-Diversity states as follows:

> "Each contracting Party shall, as far as possible and as appropriate:
> Subject to national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such *knowledge innovations and practices*."

4. Bio Piracy in Nigeria and Regulatory Approach Adopted by the Nigerian Government in Ensuring a Reward System for Traditional Knowledge

The General concept of bio-piracy is the use without authorization, especially for commercial purposes, or the appropriation of traditional knowledge or other forms of biological resources, without acknowledging the source or giving any form of compensation to the original discoverers, guides or possessors of that bio-cultural knowledge.[20]

Most of the jurisdictions where there has been an effort to adopt some form of regulatory or legislative approach to protect Traditional Knowledge were proved to exist, a general attitude of unwillingness by these traditional people in adopting government regulation. They believe such legislations and policies of government

[20] Coombe R.(1999) Intellectual Property, Human Rights and Sovereignty : "New Dilemmas in international law posed by the recognition of traditional knowledge and the conservation of Bio-diversity" Indiana Journal of Global
Legal Studies, vol. 6, pp. 59-116

corrode the nucleus of their traditional knowledge.[21] This argument by the proponents of Traditional Knowledge is based on the fact that intellectual Property rights protection is targeted towards the rights belonging to a person while Traditional Knowledge rights most times belong not to an individual but to a group of persons and sometimes to a community or a particular geographic location, regulation of which tends to narrow down ownership to a certain person or group of persons, hence eating deep into the communal nature of ownership in traditional knowledge.

Nigeria, richly blessed in natures bio – diversity has over the years seen the need to adopt some form of oversight to ensure that the economic value of its rich bio-diversity is properly maximized. While there has been a major advancement in the development of intellectual property guidelines and policies to safeguard IP rights, such advancement in protecting Traditional knowledge has not been recorded. In the next part of this work, much light would be shed on the modalities adopted by the Nigerian government in ensuring protection and wide acceptability of Bio-cultural knowledge.

Having earlier identified the unwillingness on the part of the proponents of TK to embrace legislation, a question now arises as to what mode of protection bests suits both the conventional nature of protection (legislation) which also takes into consideration the Traditional demands of Traditional Knowledge, using the Nigerian example as a case study.

While some commendable efforts were made in recent past to ensure protection of traditional Knowledge in Nigeria vis a vis adoption of the provisions of Article 8 (J) CBD into the copyrights Act, there still remains areas where much work needs to be done to ensure maximum protection. Just recently the scope of Intellectual property protection in Nigeria was expanded to include folklore.[22] S. 28 (1):

> Expressions of folklore are protected against:
> a. Reproduction
> b. Communication to the public by performance, broadcasting, distribution, by cable or other means,
> c. Adaptation, translations and other transformations,
>
> when such expressions are made either for commercial purposes or outside their traditional or customary context.

[21] Ibid.
[22]Section 28.Copyright Act of Nigeria, 2004.

Another major stride taken by the Nigerian government to ensure the Protection of Traditional Knowledge in recent times was the establishment of an agency of government named Nigeria Natural Medicine Development Agency (NNMDA), established by an Act of parliament in 1997, whose mandate among others includes, to research, develop, collate, document, preserve, conserve, and promote Nigeria`s Natural Medicine (Traditional/indigenous healthcare systems, medications and non-medication healing arts, Science & Technology) and assist facilitate their integration into the National healthcare Delivery System.

This department has since establishment maintained a registry of novel inventions that are termed Traditional Knowledge and this documentation may serve as proof in claims of ownership where an act of bio –piracy is established. These claims of ownership are however subject to some certain legislation in Nigeria that expressly withholds protection of certain species under traditional knowledge.[23] A glossary from the website of WIPO (World Intellectual Property Organization) that may not amount to legal advice, but opinion of the organization states that "an existing IP law can provide protection for traditional Knowledge and Traditional cultural Expressions."[24]

Since domestic IP laws tend to assume control over the commercial exploitation of certain novel inventions including traditional knowledge, then it follows that any form of official record (a registry of novel inventions) categorized under traditional or indigenous medications or healing techniques can be tendered in evidence as proof of ownership of such traditional Knowledge. Prior to the establishment of this agency, it was almost impossible to prove ownership of traditional knowledge as such knowledge was most times was handed down from generation to generation, but with the establishment of this agency, some form of record is now being kept and persons, communities and custodians of these traditional inventions are identified easily for any form of reward that may accrue from an access and benefit sharing agreement.

Drawing the curtain on Nigeria`s efforts in protecting Traditional Knowledge, commendable steps have so far been taken in the amendment of the existing Copyrights law to widen its scope of applicability, However efforts must be intensified to ensure speedy ratification of all current international treaties, so that domestic legislation is in tune with the happenings worldwide.

[23] S. 1 (4) of the Patents and Designs Act CAP P2 LFN 2004. This act expressly removes plants and animals and biological processes that follow suit from patentability.
[24] WIPO Frequently asked Questions : www.wipo.int/tk/en/resources/faqs

1. International Protections of Traditional Knowledge

5.1 The Convention on Bio-Diversity (CBD):

The lack of bargaining power held by developing countries has led to the belief that the developed countries have exploited their Traditional Knowledge to create patentable products based upon the prevailing knowledge in the traditional societies. The same people who were instrumental in the creation of this knowledge are denied the benefits as the products become too expensive for them to afford. Some of these communities or nations came together in 1992 to formulate some model rules that should be administered by its members in their quest to protect their traditional knowledge.[25]

At the United Nation`s Conference on Environment and Development which was held in Rio De Janerio under the auspices of UNEP, the Rio declaration on environment and development established the Convention on Biological Diversity (CBD). The CBD entered into force in 1993 and among its objectives was the conservation of biological diversity, sustaining the use of its components and ensuring fair and equitable sharing of benefits arising out of the utilization of genetic resources.[26]

The CBD is composed of members who are called Contracting Parties and they meet periodically (usually bi-annually). While the coming into force of the CBD was a commendable move to jettison the general opinion held that West of African Bio-cultural knowledge was the "witches' brew of ignorance and superstition[27]", such knowledge is still today subjected to the western empirical scrutiny and the gate keeping functions of the IPR regimes.[28]

5.1.1 Access and Benefit Sharing Provision under the CBD

Article 8(j) of the CBD requires contracting parties to "respect, preserve, and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyle relevant for the conservation and the sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such

[25] S. Ragavan "Protection of Traditional Knowledge" 2 Minnesota Intellectual Property Reveiw 1 (2001)
[26] G. Dutfeild, ibid.
[27] I. Mgbeoji" Bio cultural Knowledge and the challenges of intellectual property rights regimes for African Development" Nigerian Institute of Advanced Legal Studies Journal on Intellectual Property Vol. 1 No. 2, pp 1-43.
[28] Ibid.

knowledge, innovations and practices".[29] The above provision mandates contracting parties to allow access to their knowledge, innovations and practices, bearing in mind that any economic benefit arising from such knowledge, innovation or practices will be shared with the traditional people and maybe the research institute that developed such knowledge, innovation or practice.

At the 6th meeting of the Conference of Parties, some guidelines on access to genetic resources and fair and equitable sharing of benefits arising out of their utilization were officially adopted.[30] These guidelines were used to implement the provisions of Article 8(j) of the CBD. Today Countries like Australia have implemented procedures that minimize the transaction costs, bureaucracy, and delays associated with granting access to generic resources for non – commercial research. By using standardized documents, provider countries can promote international research collaborations without compromising control of the use of their genetic resources. Example of such document is the Standard Material Transfer Agreement of the ITPGRA (International Treaty for Plant Genetic Resources for Food and Agriculture).[31]

5.2 Protection of Traditional Knowledge: Wipo`S Efforts

As early as 1982, WIPO and UNESCO set a model law called the Model Provisions for National Laws on the Protection of Expression of Folklore against Illicit Exploitation and other Prejudicial Actions.[32] This model law set in motion many regulations, conventions and enactment of legislations, which followed in subsequent years. The 1982 WIPO-UNESCO model law provided an appropriate starting point and encouraged Nations to formulate rules that will protect their traditional knowledge taking into consideration the distinct nature of folklore. This was a very commendable step by WIPO and UNESCO as early as 1982, to start formulating a model law that will help to protect Traditional Knowledge.

The WIPO saw the need for a legal instrument to protect Knowledge and in 1999 engaged on a fact finding mission to various parts of the world, exploring the intellectual property aspects of Traditional Knowledge and the needs and expectations

[29] Article 8(j) Convention on Biological Diversity (1992).
[30] Guidelines on access to genetic resources and fair and equitable sharing of benefits available on www.cbd.int/doc/decisions/cop-06-dec-23-en.pdf
[31] Preserving International Access to Genetic Resources for Non-Commercial Bio-Diversity Research. A Paper Delivered at a Workshop on Access and Benefit Sharing in Non-Commercial Biodiversity Research Bonn 17-19th November 2008.
[32] *Provision for National Laws on the Protection* of *Expressions* of *Folklore against Illicit Exploitation and Other*. *Prejudicial Actions*, 1982 ("*the Model Provisions*").

of holders.[33] In recent times, several projects have been embarked upon by WIPO with the aim of ensuring protection and preservation of Traditional Knowledge rights of communities.

6. Conclusion and Recommendations on Adequate Enforcement Procedures in Protecting Traditional Knowledge Rights in Nigeria

Having reviewed the steps taken by the Nigerian government to protect traditional knowledge rights, it may now be necessary to evaluate the adequacy of protection offered by existing legislation, guidelines and policies. Going a step further, a review of the punitive measures offered by existing laws and policies when a breach of TK occurs would be relevant. Suggestions and recommendations would be made in this work on the best way of ensuring sufficient protection for TK right holders in Nigeria. Whereas this discourse is focused on aspects of intellectual property, much emphasis needs to be laid and taken into consideration while drafting legislation to ensure that Traditional knowledge rights of a people are protected not only from the economic standpoint but from a self determination and human rights point of view. These traditional practices, healing techniques etc are long practiced way of life that has become their very being and existence. Therefore any attempt in remodeling/rebranding these techniques and making profits from them means robbing a people of their very existence. In the words of Angela Wilson:

> "At the dawn of the 21st Century, the recovery of the indigenous knowledge is a conscious and systematic effort to revalue that which has denigrated and revive that which has been destroyed. It is about regaining the ways of being that allowed our peoples to live a spiritually balanced, sustainable existence within our ancient homelands for thousands of years[34]"

From the above, it is recommended that any draft legislation that aims to protect the indigenous rights of a people should view benefit sharing as a secondary reason for protection under intellectual Property, as the Knowledge sought to be protected is the very existence of a people. It follows then that if Traditional Knowledge is the very existence of a people, incidents of bio piracy should be likened to the crime of genocide (eroding the very existence of a people) and adequate punitive measures capable of enforcement should be put in place when making draft legislation.

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[33] S. Verma "Protecting Traditional Knowledge: is Sui Generis System an answer"?.7 Journal of World Intellectual Property 765 Geneva, Nov. 2004

[34] Waziyatawin Angela Wilson " Indigenous Knowledge is Indigenous empowerment" American Indian Quarterly, Vol. 28 no. ¾, special issue (2004) pp. 359-372

It is recommended that stipulated laid down steps should be in place, to guide bio prospectors on modalities of prospecting and securing clearance before accessing sites, a people, interviews, and any strategies they may employ in collating data. In advanced jurisdictions where adequate steps have been taken to protect the Traditional Knowledge of a certain people, "Ethical Clearance" is secured before any form of inquiry, investigations, and interviews is embarked upon. This clearance aims at protecting from unlawful access, illegal prospecting and gathering of information. It is further recommended that existing Government regulatory Agencies of government such as the National Institute for Pharmaceutical Research and Development (NIPRD) charged with the responsibility of protecting Traditional knowledge should have within its framework departments charged with the responsibility of granting access after ensuring that the intended bio-prospector abides with the ethical methodology of retrieving information without damaging the core of the Traditional knowledge of a people. Approval Permits, Ethical Clearance for study or research, Informed consent from locals who are interviewed, are some of the ways government regulatory agencies will ensure that while granting access to bio prospectors, the Traditional knowledge of a people are preserved.[35]

Finally, with the lack of a robust local legislation stipulating adequate protection of trade secrets in Nigeria, Traditional Knowledge that hinges mostly on secret processes, patterns, formulae, techniques, methods which are handed down from many generations are not adequately protected, as contemporary non-disclosure agreements and non-circumvention agreements may not be sufficient protection for informal traditional secrets, hence the need for draft legislation specifically tailored for the protection of trade secrets which includes Traditional Knowledge .

[35]S. Hidayati, B.Ghani, B. Giridharan, M. Hassan and F. Franco, "Using Ethnotaxonomy to Assess Traditional Knowledge and Language Vitality: A Case Study with the Vaie People of Sarawak, Malaysia" Ethnobiology Letters, Vol9. No.2, (2018) pp 33-47