



Traditional knowledge: Is perpetual protection a good idea?

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SUMARIO: I. Introduction. II. Traditional knowledge and the existing framework. A. What is Traditional knowledge? B. How does traditional knowledge relate to the existing regime? III. Addressing the inequities in internal intellectual property law. IV. Perpetual protection for traditional knowledge? A. Why an indefinite term of protection? B. Does intellectual property law recognize indefinite protection? C. Some questions raised by perpetual traditional knowledge protection. Conclusion.

I. INTRODUCTION

Most of the international dialogue about traditional knowledge has taken place within the context of an intellectual property framework. The World Intellectual Property Organization (“WIPO”) has been the primary facilitator of this discussion. Now, following more than a decade of dialogue, the WIPO Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (“WIPO IGC”) has been given until the Fall of 2011 to come up with something concrete.¹ In 2009, the WIPO IGC was mandated to reach an agreement on an international legal instrument to protect traditional knowledge.² This is a challenging task, especially since the discussion about traditional knowledge has not advanced significantly over the past ten years. Developing countries have long advocated for international protection for traditional knowledge, while developed countries have resisted movement on the issue.³

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¹ World Intellectual Prop. Org. [WIPO], *Matters Concerning the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore*, Agenda Item 28, Decision, Gen. Assemb. Thirty-Eighth (19th Ordinary Session) (Sept. 22–Oct. 1, 2009), available at http://www.wipo.int/edocs/mdocs/tk/en/wipo_grtkf_ic_15/wipo_grtkf_ic_15_ref_decision_28.pdf. There are 184 WIPO member states. WIPO, Member States, <http://www.wipo.int/members/en/> (last visited Mar. 28, 2010).

² *Id.*

³ See, e.g., WIPO, *Bandung Declaration on the Protection of Traditional Cultural Expressions, Traditional Knowledge, and Genetic Resources*, Document submitted by the Delegation of Indonesia, at para. 8, WIPO Doc. WIPO/GRTKF/IC/11/12 (June 28, 2007); WIPO IGC, *Traditional Cultural Expressions/Expressions of Folklore and Traditional Knowledge, Comments of the United States of America*, Responses to Questions 5, 6, and 8, at 5–7, 12, 14 (Mar. 30, 2007), available at http://www.wipo.int/export/sites/www/tk/en/igc/pdf/usa_tk-tce.pdf [hereinafter *WIPO Bandung Declaration*].

Due to the intersection between traditional knowledge and intellectual property, the resulting text is likely to be a significant development for international intellectual property law. Rights established under the World Trade Organization *Agreement on Trade-Related Intellectual Property Rights* (“TRIPS”) may be affected not only by treaties - such as the *Convention on Biological Diversity* and the *International Treaty on Plant Genetic Resources*, parts of which address intellectual property - but also by a new traditional knowledge instrument.⁴

The duration of protection is one of the more contentious issues in the traditional knowledge debate.⁵ While developing countries and indigenous groups have expressed a preference for an indefinite term of protection for traditional knowledge, the developed countries have resisted engagement on such topics as premature.⁶ There is, therefore, a strong possibility that if developing country demands are met, an international instrument to protect traditional knowledge will provide for its perpetual protection.

Yet, it is not clear that the kind of protection developing countries desire will ultimately support their development objectives. From a policy standpoint, a classic characteristic of intellectual property law is that the right granted is normally subject to a limited term of protection.⁷ The term limitation counters the negative effects that can result from granting limited monopolies in intangible goods.⁸ It does so by ensuring that upon the expiration of the term the protected subject matter falls into the public domain.⁹

In this paper, I suggest that an international legal instrument that provides indefinite protection for traditional knowledge may not ultimately benefit the developing countries or the traditional knowledge generating communities. If it is not carefully crafted, it may instead cause barriers to access to information and to affordable knowledge goods. This is

⁴ Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, Legal Instruments—Results of the Uruguay Round, 33 I.L.M. 1125, 1197 (1994) [hereinafter *TRIPS Agreement*]; Convention on Biological Diversity, July 1992, 1760 U.N.T.S. 79 [hereinafter CBD]. As of February 2010, the United States has signed but not ratified the CBD. Convention on Biological Diversity, List of Parties, <http://www.cbd.int/convention/parties/list/> (last visited Mar. 28, 2010). As of February 2010, the United States has signed but not ratified the International Treaty on Plant Genetic Resources. International Treaty on Plant Genetic Resources, Resolution 3/2001, Nov. 3, 2002, 2002 WL 34434751 [hereinafter ITPGR]. The CBD and the ITPGR have provisions relating to intellectual property rights, traditional knowledge, and access to genetic materials.

⁵ UNITED NATIONS CONFERENCE OF TRADE & DEV.-INT’L CENTRE FOR TRADE & SUSTAINABLE DEV., RESOURCE BOOK ON TRIPS AND DEVELOPMENT 399 (2005)

⁶ *Id.*; *WIPO Bandung Declaration*, *supra* note 3, at 5–7, 12, 14, Responses to Questions 5, 6, and 8.

⁷ I refer here to patents, copyrights, and trademarks as the primary rights that are normally classified as intellectual property. Trademarks are, to some extent, an exception to this rule on limited term of protection. However, trademarks are only subject to protection as long as they remain distinctive and are being used in the course of trade. Further, there is a normally a term of protection for trademarks, although this term is renewable indefinitely. See *TRIPS Agreement*, *supra* note 4, arts. 15, 16, 18, 19, 33 I.L.M. at 1203–04. Geographical indications, which are also an exception to this rule, will be discussed in the body of the paper.

⁸ PETER DRAHOS, *A PHILOSOPHY OF INTELLECTUAL PROPERTY* 5 (1996) (explaining that intellectual property rights can have detrimental effects); Alina Ng, *The Author’s Rights in Literary and Artistic Works*, 9 J. MARSHALL REV. INTELL. PROP. L. 453, 463–65 (2009).

⁹ Ng, *supra* note 8, at 463–65.

not unlike those barriers that have caused difficulties for developing countries under the existing international intellectual property system.

Although the current regime does not adequately protect traditional knowledge, some of the limitations built into the existing system can and should be retained in any international instrument for the protection of a new right in intangible goods. I argue that even if traditional knowledge were to be given perpetual protection, the right should be comparatively less exclusive in nature. Additionally, with an indefinite traditional knowledge right, it may be necessary to have more extensive exceptions to the right conferred than what is normally seen under classic intellectual property law. Consequently, the result would likely be a right that is much weaker than traditional knowledge producers would want.

Alternatively, the term of protection for a traditional knowledge right should be limited. This would help to avoid the various pitfalls of the international intellectual property system, which have been the subject of extensive critique. At the same time, it could help to attain some of the equity-oriented goals of traditional knowledge-generating communities.¹⁰

Part II of this article explains traditional knowledge and how it relates to the existing intellectual property system. Part III discusses the developing country critique of international intellectual property law following the implementation of the TRIPS Agreement. It also proposes the use of an “instrumentalist” equity-oriented approach in evaluating the policy options for a possible traditional knowledge right. Part IV assesses the potential societal costs of a perpetual traditional knowledge right.

II. TRADITIONAL KNOWLEDGE AND THE EXISTING FRAMEWORK

A. *What is Traditional Knowledge?*

Broadly speaking, traditional knowledge can be described as literary, artistic, or scientific works that are the result of intellectual activity, and that have been handed down through generations.¹¹ Given the objectives of the WIPO, the definition of traditional

¹⁰ Traditional knowledge communities and traditional knowledge holders in this piece refers to those communities who have self-identified as the “traditional” or “indigenous” communities who produce traditional knowledge.

¹¹ WIPO loosely defines traditional knowledge as “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 in the industrial, scientific, literary or artistic fields.” WIPO, Glossary of Terms, <http://www.wipo.int/tk/en/glossary/> (last visited Mar. 28, 2010). The reference to “tradition-based” means “knowledge systems, creations, innovations and cultural expressions which have generally been transmitted from generation to generation” WIPO IGC, *Traditional Knowledge—Operational Terms and Definitions*, at 11, WIPO Doc. WIPO/GRTKF/IC/3/9 (May 20, 2002) [hereinafter *WIPO Operational Terms*]. For the purpose of its 2008 Gap Analysis, WIPO described traditional knowledge as referring in general to the content or substance of knowledge resulting from intellectual activity in a traditional context, and includes the know how, skills, innovations, practices and learning that form part of traditional knowledge systems, and knowledge embodying traditional lifestyles of indigenous and local communities, or contained in codified knowledge systems passed between generations. It is not limited to any specific technical field, and may include agricultural, environmental and medicinal knowledge, and knowledge associated with genetic resources. This general description of [traditional knowledge] is based on the work of the Committee itself.

knowledge excludes any item that is not the result of intellectual activity in the industrial, scientific, literary, or artistic fields.¹² This wide and flexible definition leaves room for a large category of intangible goods to be characterized as traditional knowledge.

The traditional knowledge system is also generally perceived as pertaining to a particular ethnic group or territory. As defined, traditional knowledge is a concept that is intertwined with the notion of “indigenous” or “traditional” peoples. Although there is no agreed upon definition of indigenous people in international law, they have been identified by a collection of common characteristics.¹³ In the context of the broader international discussion, the traditional knowledge of indigenous and traditional groups appears to largely capture developing country nationals. The lack of clarity in specifying the protectable groups raises various issues, including in the area of human rights, which are beyond the scope of this paper.¹⁴ For instance, if the traditional knowledge-holding groups are not clearly delineated, it can create challenges regarding the scope of application of the right.¹⁵

Finally, this knowledge is described as neither static nor old, but rather as knowledge that evolves in response to a changing environment.¹⁶ If one accepts the proposition that traditional knowledge is constantly evolving, an argument in favor of protecting this evolving knowledge would, by definition, lead to perpetual protection not unlike the concept of “evergreening” in patent law.¹⁷ Although WIPO has characterized this knowledge as innovative, it is debatable whether this intergenerational knowledge would change suf-

WIPO IGC, *The Protection of Traditional Knowledge: Draft Gap Analysis: Revision*, at Annex I, 4, WIPO Doc. WIPO/GRTKF/IC/13/5(b) Rev. (Oct. 11, 2008); WIPO IGC, *Matters Concerning Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore—An Overview*, at 11, WIPO Doc. WIPO/GRTKF/IC/1/3 (Mar. 16, 2001).

¹² *WIPO Operational Terms*, *supra* note 11, at 11.

¹³ Srividhya Ragavan, *Protection of Traditional Knowledge*, 2 MINN. INTELL. PROP. REV. 1, 4 (2001). In essence, the term “indigenous people” refers to cultural groups who are at a disadvantage relative to the populations in the states they inhabit. *Id.*

¹⁴ *See* PATRICK THORNBERRY, *INDIGENOUS PEOPLES AND HUMAN RIGHTS* 33–35 (2002).

¹⁵ Having a clear definition is important in national law making because it allows the public and industry to understand what is protected. *See, e.g.*, Robert W. Kastenmeier & Michael J. Remington, *The Semiconductor Chip Protection Act of 1984: A Swamp or Firm Ground*, 70 MINN. L. REV. 417, 445 (1985). Often, international treaties provide general guidelines and statements and leave the details to the discretion of nation-states. However, because traditional knowledge is, by definition, tied to the concept of indigenous and traditional peoples, this terminology should ideally be clearly defined in any international legal instrument. Indeed, some of the WIPO participants have acknowledged the need for a definition. African Group Submission on Document WIPO/GRTKF/IC/13/9 at Annex I, p. 2, WIPO Doc. WIPO/GRTKF/IC/14/9, (June 26, 2009)

¹⁶ *WIPO Operational Terms*, *supra* note 11, at 11; WIPO ICG, *Review of Existing Intellectual Property Protection of Traditional Knowledge*, at 11, WIPO Doc. WIPO/GRTKF/IC/3/7 (May 6, 2002) [hereinafter *WIPO ICG Existing Protection*].

¹⁷ Evergreening refers to the use of several related or overlapping patents to prolong the term of protection. *See, e.g.*, Brook K. Baker, *Ending Drug Registration Apartheid: Taming Data Exclusivity and Patent/Registration Linkage*, 34 AM. J.L. & MED. 303, 304–306 (2008) (discussing the use of evergreening in the pharmaceutical industry); Mark A. Lemley & Kimberly A. Moore, *Ending Abuse of Patent Continuations*, 84 B.U. L. REV. 63, 81 (2004) (explaining the concept of evergreening).

ficiently over time to warrant this description.¹⁸ It is probably not fair to characterize any living knowledge that has continued application as static, per se. However, the evolutionary nature of such know-how may still fall short of the concept of innovation. This may be one of many reasons why traditional knowledge cannot be adequately protected under intellectual property law.

Traditional knowledge can include traditional medicinal practices such as Indian Ayurvedic medicine, traditional farming practices, know-how relating to the uses of certain biological or chemical resources, and traditional dances, songs, or rituals.¹⁹ Thus, the broad category of traditional knowledge can range from cultural works to intergenerational know-how about the properties of certain plants.²⁰

B. How Does Traditional Knowledge Relate to the Existing Regime?

A *sui generis* regime for traditional knowledge is one of the proposed options. Some commentators view it as a necessity.²¹ This is because traditional knowledge does not easily fit within the intellectual property system. Thus, in arriving at some international agreement that will effectively protect traditional knowledge, the WIPO participants will have to decide whether traditional knowledge should be protected as a new form of intellectual property.

Although traditional knowledge and intellectual property overlap to some extent, there are also many ways in which they are quite distinct from one another.²² As a result, some kinds of traditional knowledge can be protected as intellectual property, while others cannot. Thus, traditional knowledge will not fall within the parameters of the existing intellectual property system if it is already in the public domain, or if it cannot otherwise meet the criteria for intellectual property protection.²³ Moreover, the main forms of intellectual

¹⁸ WIPO Operational Terms, *supra* note 11, at 11; WIPO ICG Existing Protection, *supra* note 16, at 11.

¹⁹ VANDANA SHIVA, PROTECTING OUR BIOLOGICAL AND INTELLECTUAL HERITAGE (1996), *reprinted in* INTELLECTUAL PROPERTY 141, 152–157 (Peter Drahos ed., 1999) (identifying various attempts to obtain patent rights based on knowledge derived from Indian medicine systems: Ayurveda, Unani, and Siddha); Council of Scientific & Indus. Research, Traditional Knowledge Digital Library, Bio-piracy of Traditional Knowledge, www.tkdl.res.in/tkdl/langdefault/common/Biopiracy.asp?GL=3DEng (last visited Mar. 24, 2010). Some aspects of Yoga and Ayurvedic medicine may be protectable as IP. For example, some Yoga poses have been copyrighted, and certain Ayurvedic products may be protected under trademark law.

²⁰ Due to some of the different legal issues that arise, WIPO created a separate framework for traditional cultural expressions. For an explanation, see http://www.wipo.int/tk/en/consultations/draft_provisions/draft_provisions.html (last accessed April 5, 2010); WIPO, *Matters Concerning Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore - an Overview*, at para 29-30, 89-90 WIPO Doc. WIPO/GRTKF/IC/1/3 (March 16, 2001).] However, traditional cultural expressions can be considered a subset of the broader category called traditional knowledge.

²¹ WIPO, *African Group Submission on Document WIPO/GRTKF/IC/13/9*, WIPO Doc. WIPO/GRTKF/IC/14/9 (June 26, 2009) [hereinafter *African Group Submission*]; Lorna Dwyer, *Biopiracy, Trade, and Sustainable Development*, 19 COLO. J. INT'L ENVTL. L. & POL'Y 219, 249–51 (2008); SHIVA, *supra* note 19, at 141–45.

²² Peter K. Yu, *Cultural Relics, Intellectual Property, and Intangible Heritage*, 81 TEMP. L. REV. 433, 443–53 (2008).

²³ In order to be a patentable invention, for example, the claimed subject matter must be new, useful, and non-obvious. 35 U.S.C. §§ 101–103 (2006). Much of what is considered traditional knowledge is not, by

property, such as patent and copyright, are subject to limited terms of protection, whereas traditional knowledge is thought by its very nature to require indefinite protection.²⁴

Nonetheless, some traditional knowledge is capable of being protected under existing laws. For example, traditional knowledge holders make use of the trademark system to identify goods as originating from a particular community.²⁵ Trade secret law can be used to protect traditional knowledge that has not been publicly disclosed, and geographical indications enable groups to identify goods in relation to a territory or community.²⁶

Due to the territorial and cultural characteristics of geographical indications, this form of intellectual property has been identified by some observers as better suited to the protection of certain kinds of traditional knowledge than other forms of intellectual property.²⁷ More significantly, unlike the other forms of intellectual property, which are normally protected for a limited term, there is no limited term of protection for geographical indications.²⁸ Furthermore, geographical indications are not subject to the variety of

definition, sufficiently novel to meet the criteria for patent protection. See *TRIPS Agreement*, *supra* note 4, art. 27(1), 33 I.L.M. at 1208. Similarly, works that are not “original” within the meaning of copyright law will not be protectable. See *id.* art. 9, 33 I.L.M. at 1201; see, e.g., Graham Dutfield, *TRIPS-Related Aspects of Traditional Knowledge*, 33 CASE W. RES. J. INT’L L. 233, 249–61 (2001); Christine Haight Farley, *Protecting Folklore of Indigenous Peoples: Is Intellectual Property the Answer?*, 30 CONN L. REV. 1, 21–23 (1997) (explaining the difficulty in obtaining copyright protection due to the originality requirement); Ragavan, *supra* note 13, at 6–25.

²⁴ For example, *TRIPS Agreement* art. 12 requires a minimum 50 year term of protection for copyright and *TRIPS Agreement* art. 33 requires a minimum 20 year term of protection for patents. *TRIPS Agreement*, *supra* note 4, art. 12, 33, 33 I.L.M. at 1202, 1210. *TRIPS Agreement* art. 26 requires industrial designs to be protected for a minimum of 10 years and art. 17 requires a minimum 7 year renewable term of protection for trademarks. *TRIPS Agreement*, *supra* note 4, art. 26, 33 I.L.M. at 1207.

²⁵ Doris Estelle Long, *Is Fame All There Is? Beating Global Monopolists at Their Own Marketing Game*, 40 GEO. WASH. INT’L L. REV. 123, 155–58 (2008) (identifying the use of trademark law as a way to strengthen local identities and protect traditional knowledge). One example is that of the Maori trademark in New Zealand. *Id.* at 156.

²⁶ *TRIPS Agreement*, art. 22(1) defines “geographical indications” as “indications which identify a good as originating in the territory of a Member, or a region or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographical origin.” *TRIPS Agreement*, *supra* note 4, art. 22(1), 33 I.L.M. at 1205. Article 22 of the *TRIPS Agreement* requires protection for regular geographical indications while Article 23 of *TRIPS* requires the World Trade Organization [hereinafter WTO] member states to provide enhanced protection for geographical indications for wines and spirits. *Id.* art. 22, 23, 33 I.L.M. at 1205–06. See *TRIPS Agreement*, Article 22.2(a), which provides that Members shall provide legal means to prevent: “the use of any means in the designation or presentation of a good that indicates or suggests that the good in question originates in a geographical area other than the true place of origin in a manner which misleads the public as to the geographical origin of the good.” *Id.* art. 22(2)(a), 33 I.L.M. at 1205. Under Article 23(1) of the *TRIPS Agreement*, WTO Member States must protect geographical indications for wines and spirits “even where the true origin of the goods is indicated or the geographical indication is used in translation or accompanied by expressions such as ‘kind’, ‘type’, ‘style’, ‘imitation’ or the like.” *Id.* art. 23(1), 33 I.L.M. at 1205.

²⁷ See, e.g., *WIPO IGC Existing Protection*, *supra* note 16, at 11; CHIDI OGUAMANAM, INTERNATIONAL LAW AND INDIGENOUS KNOWLEDGE: INTELLECTUAL PROPERTY, PLANT BIODIVERSITY, AND TRADITIONAL MEDICINE 184–85 (2006); David R. Downes, *How Intellectual Property Could be a Tool to Protect Traditional Knowledge*, 25 COLUM. J. ENVTL. L. 253, 268–69 (2000).

²⁸ See *TRIPS Agreement*, *supra* note 4, art. 22–24, 33 I.L.M. at 1205–07.

exceptions to the right conferred that is characteristic of other intellectual property rights.²⁹ By comparison, patents, copyrights, and trademarks are not absolute rights but are subject to limited exceptions under the TRIPS Agreement, the Berne Convention, and the Paris Convention.³⁰ Geographical indications appear to set a precedent for a geographically and culturally defined perpetual intellectual property right. However, as discussed below, there are important differences between traditional knowledge and geographical indications that warrant a different approach to a traditional knowledge right.

III. ADDRESSING THE INEQUITIES IN INTERNATIONAL INTELLECTUAL PROPERTY LAW

Much of the recent criticism of the TRIPS Agreement has been about the impact of intellectual property on various social issues.³¹ This includes commentary on the interaction between intellectual property and human development issues such as the relationship between patents and access to medicines, copyright and access to educational materials, as well as allegations of patent-related bio-piracy and the “misappropriation” of cultural heritage.³²

²⁹ The exceptions to which geographical indications are subject are limited to their relationship with pre-existing trademarks and terms that are common in customary language. *See id.* art. 24(4), (6), 33 I.L.M. at 1206–07.

³⁰ Berne Convention for the Protection of Literary and Artistic Works, Sept. 9, 1886 *as revised* at Paris July 24, 1971 *as amended* Sept. 28, 1979, S. TREATY DOC. NO. 99-27, 1971 WL 123138 [hereinafter *Berne Convention*]; Paris Convention for the Protection of Industrial Property, Mar. 20, 1883 *as revised* at Stockholm July 14, 1967 *as amended* Oct. 2, 1979, 1883 WL 18944 [hereinafter *Paris Convention*]. These include various exceptions to allow for the use of the protected work or innovation despite the presence of intellectual property rights. *See TRIPS Agreement*, arts. 13, 17, 30, and 31. For example, art. 17 provides “Members may provide limited exceptions to the rights conferred by a trademark, such as fair use of descriptive terms, provided that such exceptions take account of the legitimate interests of the owner of the trademark and of third parties.”

³¹ As a result of issues relating to intellectual property and public health, the WTO Member issued a declaration on TRIPS and public health. *See* the WTO, Ministerial Conference, *Declaration on the TRIPS Agreement and Public Health*, WT/MIN(01)/DEC/W/2 (Nov. 14, 2001).

³² CARLOS M. CORREA, INTELLECTUAL PROPERTY RIGHTS, THE WTO AND DEVELOPING COUNTRIES: THE TRIPS AGREEMENT AND POLICY OPTIONS 171–72 (2000) (referring to U.S. Patent No. 5,304,718 on quinoa which was subsequently invalidated, and products based on plant materials and knowledge from indigenous communities such as neem tree, kava, barbasco, endod, and turmeric); SHIVA, *supra* note 19, at 163–66 (explaining that the unequal treatment of traditional knowledge facilitates piracy through the use of patents); Frederick M. Abbott, *TRIPS in Seattle: The Not-So-Surprising Failure and the Future of the TRIPS Agenda*, 18 BERKELEY J. INT’L L. 165, 171–72 (2000) (noting the patent-related health concerns of developing country members); Olufunmilayo B. Arewa, *TRIPs and Traditional Knowledge: Local Communities, Local Knowledge, and Global Intellectual Property Frameworks*, 10 MARQ. INTELL. PROP. L. REV. 156, 168–79 (2002); Dr. Gerard Bodeker, *Traditional Medicinal Knowledge, Intellectual Property Rights and Benefit Sharing*, 11 CARDOZO J. INT’L & COMP. L. 785, 790 (2003); Dwyer, *supra* note 21, at 220–31; Lawrence R. Helfer, *Toward a Human Rights Framework for Intellectual Property*, 40 U.C. DAVIS L. REV. 971, 986–88 (2007); Charles R. McManis, *Intellectual Property, Genetic Resources and Traditional Knowledge Protection: Thinking Globally, Acting Locally*, 11 CARDOZO J. INT’L & COMP. L. 547, 548–49 (2003) (discussing the North-South division and the negative reaction of farmers in India to the TRIPS Agreement); Lee Moerman & Sandra Van Der Laan, *TRIPS and the Pharmaceutical Industry: Prescription for Profit?*, 17 CRITICAL PERSP. ON ACCT. 1089, 1090 (2006); Gwen Hinze, *WIPO: Action*

At the international level, the division over the effects of the TRIPS Agreement tends to be primarily between the developing and developed countries. The international intellectual property regime has been characterized as reflecting Western values in its protection of intangible goods.³³ This division between the North and South is further heightened by the power imbalance between the wealthier nations and the poorer nations.³⁴ Moreover, in the light of the colonial history, the system may appear to be particularly unfair towards developing country interests.³⁵

Yet the social costs that are often associated with intellectual property protection support the notion that the creation of any new intangible property right should be justified with a solid policy rationale—one that takes into consideration a balancing of rights and obligations.³⁶ This is particularly true from a developing country perspective because developing countries, non-governmental organizations, and scholars have been critical of the enhanced intellectual property standards established by the TRIPS Agreement.³⁷

An “instrumentalist” approach to intellectual property, as described by Professor Drahos, allows for a consideration of the social costs of intellectual property protection, and conceives of intellectual property law as a means to an end.³⁸ Utilizing this model,

Needed to Expand Copyright Exceptions and Limitations, SUNS #6433 (Mar. 12, 2008), available at http://www.twinside.org.sg/title2/intellectual_property/info.service/2008/twn.ipr.info.080303.htm.

³³ Ikechi Mgbeoji, *TRIPS and TRIP-Plus Impacts in Africa*, in *INTELLECTUAL PROPERTY, TRADE AND DEVELOPMENT* 259, 263–66 (Daniel Gervais ed., 2007) (outlining the colonial origins of intellectual property rights in Africa); Adebambo Adewopo, *The Global Intellectual Property System and Sub-Saharan Africa: A Prognostic Reflection*, 33 U. TOL. L. REV. 749, 749–51 (2002) (identifying most African intellectual property laws as remnants of colonialism); Arewa, *supra* note 32, at 160–63 (positing that the global intellectual property regime reflects cultural hierarchies, with most developing country cultures considered less advanced, and their values therefore not reflected in the IP treaties).

³⁴ See, Arewa, *supra* note 32, 159–163; Doris Estelle Long, “*Democratizing*” *Globalization: Practicing the Policies of Cultural Inclusion*, 10 CARDOZO J. INT’L & COMP. L. 217, 224–225 (2002)

³⁵ Doris Estelle Long, “*Democratizing*” *Globalization: Practicing the Policies of Cultural Inclusion*, 10 CARDOZO J. INT’L & COMP. L. 217, 224 (2002) (characterizing the North-South debates as more problematic than the North-North debates because of the history of political, economic, and cultural imperialism).

³⁶ A balancing of rights and obligations is consistent with the approach outlined in Article 7 of the WTO *TRIPS Agreement*, which states:

The protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations.

TRIPS Agreement, *supra* note 4, art. 7, 33 I.L.M. at 1200; see also Mgbeoji, *supra* note 33, at 293–95 (noting the expense involved for poor countries to implement intellectual property regimes, including the high costs associated with patents; and noting the possibility of an impact of prices of medicines in some countries).

³⁷ Ruth Okediji, *The Limits of Development Strategies at the Intersection of Intellectual Property and Human Rights*, in *INTELLECTUAL PROPERTY, TRADE AND DEVELOPMENT* 355, 363–66 (Daniel Gervais ed., 2007) (discussing the need to consider the right to development and self-determination in international intellectual property law); Susan K. Sell, *The Global IP Upward Ratchet, Anti-Counterfeiting and Piracy Enforcement Efforts: The State of Play*, THIRD WORLD NETWORK (June 9, 2008), http://www.twinside.org.sg/title2/intellectual_property/development.research/SusanSellfinalversion.pdf.

³⁸ DRAHOS, *supra* note 8, at 214–15.

intellectual property policy would be developed with a view to achieving particular objectives that are based on some moral value that takes into account the societal implications of the law.³⁹ Intellectual property law affects not only economic efficiency but also impacts human development through access to information and knowledge-based goods. It may therefore be appropriate to consider how intellectual property policy can help to achieve a fair and just society.⁴⁰ The same is true for other intangible goods, including traditional knowledge.

In other words, taking an instrumentalist approach to the traditional knowledge narrative can facilitate an assessment of the benefits of a perpetual traditional knowledge right for developing country nationals and indigenous peoples. This would involve an assessment of the potential outcomes in light of the stated objectives and in view of certain specific human development factors. For example, the cost and accessibility of goods, such as patented medicines, that are subject to intellectual property rights have been a major concern for developing countries.⁴¹ In light of these concerns, I consider the impact of perpetual protection on the ability of the public to easily access traditional knowledge goods at a relatively low cost.

IV. PERPETUAL PROTECTION FOR TRADITIONAL KNOWLEDGE?

Although the WIPO IGC is working towards an agreement on traditional knowledge, the terms of any such instrument have yet to be clearly identified. However, in 2009 the African Group submitted a document summarizing the various positions taken by the WIPO IGC participants and made suggestions for moving forward.⁴² The 2009 African Group proposal notes that some participants seek perpetual protection while others suggest that there is a need to balance the interests of the innovators and the public. The African Group suggests, as part of the way forward, that traditional knowledge should receive perpetual protection.⁴³ This proposal is consistent with many other developing country views.

A. *Why an indefinite term of protection?*

Although the rationale for the protection of traditional knowledge is not always clear, one consistent goal is that of equity.⁴⁴ More specifically, the WIPO participants have identi-

³⁹ *Id.* (explaining that an instrumentalist approach to intellectual property would involve the use of an unspecified moral value of a humanist orientation). Professor Chon suggests that an approach that links intellectual property to distributive justice may respond to the imbalance in the global regime. See Margaret Chon, *Intellectual Property “from Below”: Copyright and Capability for Education*, 40 U.C. DAVIS L. REV. 803, 805 (2007).

⁴⁰ GRAHAM DUTFIELD & UMA SUTHERSANEN, *GLOBAL INTELLECTUAL PROPERTY LAW* 47–48 (2008); See also Edwin C. Hettinger, *Justifying Intellectual Property*, in *INTELLECTUAL PROPERTY* 117, 137 (Peter Drahos ed., 1999) (suggesting that justifications for intellectual property may ideally turn to considerations of its social utility).

⁴¹ Helfer, *supra* note 32, at 986–88 (2007); Dwyer, *supra* note 21, at 233.

⁴² See generally *African Group Submission*, *supra* note 21.

⁴³ *Id.* at 7.

⁴⁴ Daniel Gervais, *TRIPS and Development*, in *INTELLECTUAL PROPERTY, TRADE AND DEVELOPMENT* 3, 17–18 (Daniel Gervais ed., 2007) (noting that many countries who feel that they are rich in traditional knowledge

fied a need to ensure fair and equitable benefit sharing as one of objectives of traditional knowledge policy.⁴⁵ Some related equity-oriented objectives include recognizing the value of traditional knowledge, and promoting respect for the dignity and cultural integrity of traditional knowledge holders.

In order to ensure the adequate protection of traditional knowledge, it is suggested that the right should be indefinite and even retroactive to protect historical works.⁴⁶ Due to the inter-generational nature of the knowledge, perpetual protection is seen as an important element in creating an effective legal regime. Furthermore, because some groups may object to the use of works related to their cultural identity, indefinite protection is important for certain traditional knowledge holders.⁴⁷

Clearly, some of the stated objectives of traditional knowledge protection are distinct from the incentivizing role of intellectual property. This may be another reason why traditional knowledge does not fit within a classic intellectual property model. Nonetheless, because traditional knowledge, like intellectual property, is about the legal treatment of intellectual creations and know-how, some elements of the legal structure of intellectual property law remain relevant. In particular, the term limitation is pertinent to the concern about the impact of rights in intangible goods on human development factors that depend upon continual access to knowledge and knowledge-based goods.

B. Does Intellectual Property Law Recognize Indefinite Protection?

The grant of a time-limited right is an important characteristic of intellectual property law.⁴⁸ Thus, as a general proposition, when the right conferred is more limiting or restrictive, the term of protection is generally shorter. This is evident, for example, from the shorter term of protection for patents as compared to copyrights, the latter of which results in a more limited monopoly than patent protection.⁴⁹ For both patents and copyrights, once

and folklore feel that they have not benefitted from the traditional intellectual property system); CARLOS M. CORREA, QUAKER U.N. OFFICE, TRADITIONAL KNOWLEDGE AND INTELLECTUAL PROPERTY: ISSUES AND OPTIONS 5 (2001), <http://www.quno.org/geneva/pdf/economic/Discussion/Traditional-Knowledge-IP-English.pdf>.

⁴⁵ WIPO IGC, *The Protection of Traditional Knowledge: Revised Objectives and Principles*, Annex, art. 6, at 27, WIPO Doc. WIPO/GRTKF/IC/9/5 (Jan. 9, 2006).

⁴⁶ WIPO, Comm'n on Human Rights Sub-Comm'n of Prevention of Discrimination and Protection of Minorities Working Group on Indigenous Populations, *The Mataatua Declaration on Cultural and Intellectual Property Rights of Indigenous Peoples*, Recommendation 2 (July 19–30, 1993), available at http://www.wipo.int/export/sites/www/tk/en/folklore/creative_heritage/docs/mataatua.pdf]; WIPO, *Declaration of Shamans on Intellectual Property and Protection of Traditional Knowledge and Genetic Resources*, at 3–4, para. 15, WIPO Doc. WIPO/GRTKF/IC/2/14 (Dec. 12, 2001); Dutfield, *supra* note 23, at 251; Paul Kuruk, *Goading a Reluctant Dinosaur: Mutual Recognition Agreements as a Policy Response to the Misappropriation of Foreign Traditional Knowledge in the United States*, 34 PEPP. L. REV. 629, 655 (2007).

⁴⁷ Dutfield, *supra* note 23, at 251; Farley, *supra* note 23, at 17–18.

⁴⁸ More recently accepted forms of international intellectual property, such as geographical indications, are an exception to this principle of term limit. Though trademarks can be renewed indefinitely, they are subject to a specified term of protection. See *TRIPS Agreement*, *supra* note 4, art. 18, 33 I.L.M. at 1204.

⁴⁹ The minimum term of protection for patents is 20 years from the date of filing and can only be granted in respect of a single invention. Thus, the same independently created innovation will no longer meet the criteria for patent protection. See *TRIPS Agreement*, *supra* note 4, art. 27(1), 33 I.L.M. at 1208, 1210.

the term of protection expires the creative work or invention becomes part of the public domain so that it can be used, modified, and built upon by others.⁵⁰ Trademarks are also subject to a term of protection, although this term is renewable indefinitely.⁵¹

As a form of internationally recognized intellectual property without any term of protection, geographical indications seem to be particularly relevant to the traditional knowledge discussion. However, an important distinction between traditional knowledge and geographical indications is that a geographical indication, like a trademark, protects a name used in connection with a particular item but not any underlying knowledge. An indefinite term of protection for traditional knowledge would likely extend not only to the use of names, for example, but also to the relevant substantive knowledge. Thus, the effect of a perpetual traditional knowledge right would not be comparable to the indefinite protection enjoyed by geographical indications. The traditional knowledge right would arguably be stronger. Currently, there is no intangible property right that offers indefinite protection over uses relating to substantive knowledge.⁵²

C. *Some Questions Raised by Perpetual Traditional Knowledge Protection*

As discussed, traditional knowledge protection could be perpetual and even retroactive. This raises several issues. First, how far into the past should one go in order to ascertain to whom the knowledge should be attributed? A second and related question is how to identify

In most countries, the first to file the invention will be entitled to patent protection, and in the United States, it is the first to invent who will be entitled to the patent. See Michael F. Martin, *The End of the First-to-Invent Rule: A Concise History of Its Origin*, 49 IDEA 435, 436 (2009). By comparison, under the *Berne Convention*, the standard minimum term of copyright protection for literary and artistic works is the life of the author plus 50 years. See *Berne Convention*, *supra* note 30, Article 7(1); *TRIPS Agreement*, *supra* note 4, art. 12, 33 I.L.M. at 1202. A patent is a more exclusive right than a copyright because it is not possible to obtain protection on an independently created identical invention, while copyright law will protect an original work that is similar to an existing work, as long as the work is original. Thus, two artists who independently sketch the same scene will each be entitled to their respective copyrights. *TRIPS Agreement*, *supra* note 4, arts. 27(1); J. H. Reichman, *Charting the Collapse of the Patent-Copyright Dichotomy: Premises for a Restructured International Intellectual Property System*, 13 CARDOZO ARTS & ENT. L.J. 475, 481-482 n.22 (1993).

⁵⁰ See, e.g., Ng, *supra* note 8, at 463-65 (explaining that the limitations on copyright, including the limited term, ensure that the public is the ultimate beneficiary of an author's works).

⁵¹ *TRIPS Agreement*, *supra* note 4, art. 18, 33 I.L.M. at 1204.

⁵² The patent right, for example, allows the right holder to prevent others from using the invention and effectively, therefore, from utilizing the knowledge underlying the patent. However, the patent term is limited to 20 years from the date of filing. See *TRIPS Agreement*, *supra* note 4, art. 33, 33 I.L.M. at 1210. It could be argued that trade secret law allows perpetual control over substantive uses. However, trade secrets are limited in that efforts must be made to maintain secrecy in order to have legal protection afforded to the trade secret. *TRIPS Agreement*, *supra* note 4, art. 39, 33 I.L.M. at 1212. Also, competitors are free to engage in reverse engineering. See *id.* art. 39(2) & n.10, 33 I.L.M. at 1212 & n.32. (trade secrets are protected from acquisition that is "contrary to honest commercial practices," meaning "at least practices such as breach of contract, breach of confidence and inducement to breach, and includes the acquisition of undisclosed information by third parties who knew, or were grossly negligent in failing to know, that such practices were involved in the acquisition") ALAN L. DURHAM, *PATENT LAW ESSENTIALS: A CONCISE GUIDE*, 3RD ED., 13 (Praeger, 2009) (explaining that, in contrast to patents, acquiring information through reverse engineering is permissible under trade secret law)

and delineate the group or groups to which the knowledge should be ascribed. Some of the knowledge may date back so far that it becomes difficult to connect the knowledge to an existing cultural or ethnic group. Third, when should the protection commence?

i. Some Examples of Traditional Knowledge—Old and New

In 1787, Nicolas LeBlanc invented baking soda, which is now a common household item.⁵³ It appears that the invention was an attempt to reduce British reliance on natron, a naturally occurring substance imported into Europe from Egypt and used in large quantities in industrial processes at that time.⁵⁴

Natron was used by the ancient Egyptians for a variety of purposes ranging from the mummification process to cleaning. For example, the ancient Egyptians apparently used natron for household cleaning, as well as to cleanse the body and the teeth, and to prevent body odor.⁵⁵ Today, baking soda, which is the closest thing to the naturally occurring natron, is widely known for its cleansing properties, and can be found in products such as toothpaste and deodorant.⁵⁶ Arguably, the know-how regarding the use of natron for its cleansing properties, or a synthetic version of natron, can be attributed to the ancient Egyptians.

More recently, the case of the San people in southern Africa generated significant global attention.⁵⁷ The San have traditionally used the *Hoodia* cactus plant to stave off hunger and thirst during long hunting trips.⁵⁸ In 1995, the South African Council for Scientific and Industrial Research (“CSIR”) obtained a patent on the element of the *Hoodia* cactus that has appetite-suppressing properties.⁵⁹ The patent was subsequently licensed to a U.K. biotechnology company, and then to the pharmaceutical giant Pfizer.⁶⁰ The San threatened legal action against the CSIR, claiming that their traditional knowledge had been taken without their prior informed consent.⁶¹ In 2002, the CSIR and the San reached

⁵³ T.K. DERRY & TREVOR I. WILLIAMS, *A SHORT HISTORY OF TECHNOLOGY: FROM THE EARLIEST TIMES TO A.D. 1900* 531–34 (Dover Pubs. 1993) (1960).

⁵⁴ *Id.*

⁵⁵ Judith Illes, *Beauty Salts*, available at <http://www.touregypt.net/featurestories/salt.htm> (last visited Mar. 28, 2010).

⁵⁶ See, e.g., Government of Ontario, Ministry of Environment, *My Environment: Cleaning Products*, available at <http://www.ene.gov.on.ca/en/myenvironment/home/cleaningproducts.php> (last visited Mar. 28, 2010). Baking soda is often promoted as a “natural” alternative that one can use instead of cleaning with harsh chemicals.

⁵⁷ Craig Allen Nard, *In Defense of Geographic Disparity*, 88 MINN. L. REV. 222, 231 n.55 (2003).

⁵⁸ COMMISSION ON INTELLECTUAL PROPERTY RIGHTS, INTEGRATING INTELLECTUAL PROPERTY RIGHTS AND DEVELOPMENT POLICY 77-78 (2002), available at http://www.iprcommission.org/papers/pdfs/final_report/CIPRfullfinal.pdf [hereinafter COMMISSION ON IP RIGHTS].

⁵⁹ Heather A. Sapp., *Monopolizing Medicinal Methods: The Debate Over Patent Rights for Indigenous Peoples*, 25 TEMP. J. SCT. TECH. & ENVTL. L. 191, 194 (2006)

⁶⁰ COMMISSION ON IP RIGHTS, 77; Lee Gillespie-White & Eric Garduño, *Treading an Independent Course for Protecting Traditional Knowledge*, INTERNATIONAL INTELLECTUAL PROPERTY INSTITUTE (April 2002), available at <http://www.iipi.org/Views/TK0402.pdf>.

⁶¹ Sapp, *supra* note 59, at 194.

an agreement whereby the San, as the custodians of traditional knowledge associated with the *Hoodia* cactus, will receive a share of any future royalties.⁶²

The case of turmeric is another modern example of alleged bio-piracy of traditional knowledge. Turmeric is a spice commonly used in Indian cooking. It has also long been used in traditional medicine to heal wounds and rashes. In 1995, two Indian nationals at the University of Mississippi Medical Centre obtained a U.S. patent for the “use of turmeric in wound healing.”⁶³ The Indian Council of Scientific and Industrial Research had the patent re-examined by the United States Patent and Trademark Office.⁶⁴ The patent was revoked on the basis that the use of turmeric for healing was not novel.⁶⁵

ii. What are the implications of creating a perpetual exclusionary right over such knowledge?

The know-how about the medicinal uses of the *Hoodia* cactus or turmeric could be subject to indefinite protection as traditional knowledge. Likewise, knowledge about the uses of natron for its cleansing properties could have been the subject of such perpetual protection. Indeed, depending on the extent of the retroactivity of the traditional knowledge protection, perhaps the know-how about the cleansing properties of baking soda could still attain some kind of protection as the traditional knowledge of the ancient Egyptians.

The ability of the indefinite term of protection to achieve the objective of equity without increasing cost and access for the average person will be affected by the nature of the right granted. For example, just as patents can affect the accessibility of pharmaceutical medicines, a traditional knowledge right could conceivably affect access to traditional medicines. For some developing countries, this would not be a minor issue, especially since many of their citizens place some reliance on traditional medicinal systems in their countries.⁶⁶

a. Benefit Sharing

Perhaps, like the San people, the ancient Egyptians should have been entitled to share in the profits arising from the baking soda industry. After all, baking soda is essentially a synthetic version of a naturally occurring product, the benefits of which were likely known to Europeans as a result of ancient Egyptian traditional knowledge. Just as the British probably relied on the traditional knowledge of the Egyptians in their development and uses of baking soda, a South African research organization relied on the traditional knowledge of the San people in their development of a new product.

⁶² COMMISSION ON IP RIGHTS, *supra* note 54, at 77–78; Council of Scientific and Industrial Research, *Bio-piracy of Traditional Knowledge*, TRADITIONAL KNOWLEDGE DIGITAL LIBRARY, <http://www.tkdil.res.in/tkdil/langdefault/common/Biopiracy.asp?GL=Eng> (last visited Mar. 28, 2010) [hereinafter *Bio-piracy*]. Given the market potential for an effective appetite suppressant, the financial benefits to the San are potentially significant even if they are only to receive a very small portion of the profits.

⁶³ COMMISSION ON IP RIGHTS, *supra* note 60, at 76.

⁶⁴ *Id.*

⁶⁵ *Id.*; *Bio-piracy*, *supra* note 60. In this case, note that the patentees were Indian expatriates who were living in the U.S., not persons foreign to the source community.

⁶⁶ SHIVA, *supra* note 19, at 141–42.

It also seems fair for knowledge about the uses of this ancient salt, which served as the inspiration for baking soda, to be attributed to the ancient Egyptians. The question is whether the descendants of the ancient Egyptians should now be accorded some entitlement to share in the benefits arising from the commercialization of baking soda—a product apparently derived from the traditional knowledge of the uses of natron. Perhaps this requires one to look too far back in time. Yet, if know-how regarding the uses of turmeric, which is apparently thousands of years old, should be subject to protection, why not know-how regarding the uses of natron?⁶⁷ If one is willing to look back far enough, it may be discovered that there are many forms of traditional know-how that have now become commonly known.

Moreover, in looking retrospectively, one can simultaneously look prospectively and imagine that one thousand years from now someone may query the utility of allowing certain groups to control the uses of traditional know-how which would by then be ancient. Looking far into the past helps to give some perspective on how far into the future this knowledge should ideally be protected.

In the *Hoodia* cactus case, a perpetual right would, in line with the objective of equitable remuneration, allow the San to share in the potential profits of an appetite suppressant created in reliance on their traditional knowledge. A limited term of protection or a contractual arrangement could achieve the same objective, although not forever. Of course, the question of how much the right holders should share in the profits can be a complicated matter. One could also expect that if the payment would be indefinite, then knowledge holding communities might be fairly remunerated by a much smaller percentage of any profits than if their entitlement were time limited.

From a cost perspective, companies that enter into benefit sharing arrangements, or that are otherwise obligated to make payments to traditional knowledge holders, would likely factor this cost into the pricing of the product. However, consumers who could afford to do so may, in fairness, choose to accept this tax in exchange for the benefits they enjoy from the use of the know-how.⁶⁸ For developing country nationals, however, it could mean that certain traditional knowledge generating communities might see their standard of living improve while others face new costs. This result may not be equitable, taking into consideration the various stakeholders.

The overall societal impact of the benefit sharing would depend on which groups produce know-how that has market value, assuming such groups could be clearly identified. It would also be affected by the extent to which such groups would effectively dominate the traditional knowledge market in any given region. Even if no group were to monopolize the market, if a perpetual right means perpetual payment, then the cost to consumers over time would eventually become disproportionate to the societal contribution made by the

⁶⁷ COMMISSION ON IP RIGHTS, *supra* note 60, at 76 (describing turmeric as having been used for thousands years).

⁶⁸ This would be similar to consumers who are willing to pay a higher price for “fair trade” products. *See, e.g.*, Fair Trade Federation, <http://www.fairtradefederation.org/ht/d/sp/i/2733/pid/2733> (last visited Mar. 28, 2010).

traditional knowledge holders. One way to avoid such an outcome is to create the possibility of a traditional knowledge royalty or other payment that diminishes over time.

For patented products, the question arises as to what happens after the patent expires. For example, there is a patent related to the hunger suppressing extract from the *Hoodia* cactus. This patent is based on information about the know-how relating to the use of the *Hoodia* plant as an appetite suppressant. Normally, at the expiration of a patent term, the public is free to make use of and build upon the knowledge that was the subject of patent protection. However, if the knowledge underlying an invention is the subject of both patent rights and traditional knowledge rights, then the expiration of the patent would not necessarily allow the know-how to fall into the public domain. This could mean that persons who wish to make use of the knowledge would still have to seek the permission of the traditional knowledge right holder in order to utilize the know-how. A user may also have to pay for any such use. For example, it has been suggested that a *sui generis* liability regime for traditional knowledge could adopt a system of payment after use, including for traditional know-how that is already widely known.⁶⁹ Thus, while the expiration of the patent term would provide some relief from costs associated with a patented product, the public would still have to bear the costs associated with any relevant traditional knowledge right.

This system may be equitable, but only to a certain extent. The right holder may benefit, but it is not clear that the public would also benefit. After the expiration of the patent term, the patentee would no longer be entitled to remuneration based the patent right, despite the inventor having contributed her know-how to that of the traditional knowledge holder in order to create the invention.⁷⁰ The patentee, having disclosed the invention to the public at the time the patent was granted, must now allow the public to use the knowledge without charge. This allows the public to benefit from and ultimately utilize the patentee's work. The traditional knowledge right holders, on the other hand, who may have shared in the financial rewards arising from the commercialization of the patented good, could still charge the public for use of this knowledge. Putting the patentee on the same footing as the traditional knowledge holder could require the grant of perpetual patents over inventions that are based on traditional knowledge. In light of the international debates over the effect of patents on access to new technologies, and medicines in particular, it is unlikely that anyone would consider such an outcome to be socially beneficial from the perspective of cost and accessibility.⁷¹ However, it is not obvious that the patentee is less deserving of protection than the traditional knowledge generating community.

If one accepts the term "equitable" to mean what is "fair" and "just," it is debatable whether it is equitable for the public to perpetually pay even a nominal amount for the use

⁶⁹ DUTFIELD & SUTHERSANEN, *supra* note 40, at 346.

⁷⁰ The patentee may still be entitled to compensation for other reasons, but once the patent has expired, the protected technology falls into the public domain. Thus, any claims by the patentee to payment related to the use of the technology cannot be based on the expired patent.

⁷¹ See, e.g., WTO, *Declaration on the TRIPS Agreement and Public Health*, WTO, Ministerial Declaration of 14 November 2001, WT/MIN(01)/DEC/2, 41 I.L.M., 755 (2002)

of inter-generational know-how.⁷² Fairness requires a balancing of competing interests.⁷³ In this case, fairness involves the interests of the right holder versus those of society. At what point does the payment for the know-how no longer serve both the greater good of society as well as the interests of the right holder, but rather serve *only* the right holder? If a traditional knowledge right holder has already shared in the benefits arising from the commercialization of the knowledge, then it may be more equitable for all subsequent uses of the know-how to be free of charge. Otherwise, the result is not necessarily equitable once you take into account the continuous revenue for the right holder as compared to the perpetual costs and decreased access for the consumer.

b. A Broad Right: Controlling Non-Commercial Uses

If a traditional knowledge right for turmeric, the *Hoodia* cactus, or natron, for example, would enable the right holder to prevent others from using this knowledge for any purpose without consent, then an indefinite term of protection would be less palatable. This is because the right would tend to interfere with the human development values of disseminating knowledge and ensuring access to affordable knowledge-based goods.

The ability to indefinitely control the disclosure of the know-how has widespread implications. The commercialization of a traditional knowledge product would not necessarily result in the public having access to the knowledge, although the public might have access to the knowledge-based item. This is one of the reasons why patents are, from a public policy perspective, preferable to trade secrets. Whereas patents ensure the disclosure and dissemination of knowledge and discourage secrecy, trade secrets have the opposite effect. Even if an invention is sufficiently modified and a new patent granted, the term will eventually expire and the knowledge will fall into the public domain. By comparison, a perpetual right that allows the traditional knowledge holder to control the uses of the knowledge could prevent its dissemination.

In any event, given the way traditional knowledge has been characterized, even if disclosure were required in order for traditional knowledge to receive a limited term of protection, it would be constantly “evolving.” Hence, it could be continuously protected, possibly with an expanding scope of protection to cover the evolutionary uses. This problem relates to the potentially broad scope of application of traditional knowledge. Though it goes beyond the discussion in this short paper, the issue of the scope of the right is also relevant to the question of term of protection.

In the case of traditional knowledge that has some special religious, cultural, or spiritual value, consent to the use of such knowledge by persons outside of the community

⁷² Black’s Law Dictionary defines “equitable” as “[j]ust; conformable principles of justice and right.” BLACK’S LAW DICTIONARY 537 (6th ed. 1990).

⁷³ Black’s Law Dictionary defines “fair” as, *inter alia*, “free from prejudice, favoritism and self-interest; . . . equal, as between conflicting interests.” BLACK’S LAW DICTIONARY 595 (6th ed. 1990). THE CONCISE OXFORD DICTIONARY 10th ed. (Oxford, University Press, 1999) defines fair as, *inter alia*, “treating people equally; . . . just and appropriate in the circumstances.”

may not be granted at all.⁷⁴ Intellectual property law recognizes that some subject matter may not be protectable because it is contrary to public order or morality.⁷⁵ Yet, intellectual property law does not go beyond this general limitation, nor do the relevant international instruments attempt to define what should constitute public order or morality. The protection of knowledge primarily due to its cultural or religious significance is something that is clearly outside the realm of intellectual property law. Moreover, since the question of what is offensive may differ significantly between nations and communities, it may be impossible to achieve agreement on anything more than a very general statement regarding morally offensive uses. Effectively, the international treaties allow states to refrain from extending intellectual property protection to certain subject matter.⁷⁶ It is entirely different to create a right in intangible goods that allows one to control offensive uses.

At the same time, the ability to prevent offensive uses outside the commercial context appears to be one of the goals of traditional knowledge protection. A mechanism to prevent the creation of intellectual property rights in materials that would be morally or spiritually offensive to traditional knowledge holders would not differ significantly from the existing concept of excluding morally offensive subject matter from intellectual property protection. However, an ability to regulate offensive uses of traditional knowledge should probably be developed as something other than a perpetual property right. This is because such a right may allow traditional knowledge holders to proscribe use of the knowledge beyond a level that would be equitable.

c. *A Narrow Right: Control Limited to Commercial Uses*

A traditional knowledge right that would be limited to control over commercial uses renders an indefinite term of protection potentially more attractive. A “commercial use” would need to be defined so that it would be clear what is included in the prohibited acts. For instance, a right holder should probably not be able to prevent the private re-sale of a traditional knowledge good or the private use of traditional know-how.

If the traditional knowledge right would serve to effectively prevent the acquisition of proprietary rights in a traditional knowledge-based good, then it could be seen as preserving the public domain rather than depleting it. For example, an argument could be made that preventing patents related to the medicinal uses of turmeric ensures that the know-how remains publicly available. In the case of turmeric, two Indian nationals sought an American patent based on Indian know-how.⁷⁷ A traditional knowledge right could have been utilized to ensure that the know-how remains available to the Indian and global community rather than becoming subject to a patent held by two individuals. The same result was achieved through a challenge to the patent, but such challenges are not always

⁷⁴ Yu, *supra* note 22, at 457.

⁷⁵ See, e.g., *TRIPS Agreement*, *supra* note 4, art. 27(2), 33 I.L.M. at 1208.

⁷⁶ *Id.*

⁷⁷ See Shayana Kadidal, *Subject-Matter Imperialism? Biodiversity, Foreign Prior Art and the Neem Patent Controversy*, 37 IDEA 371, 401 n.150 (1997).

successful.⁷⁸ In my view, this is the strongest case for a perpetual traditional knowledge right: one that prevents the inappropriate acquisition of intellectual property rights over such inter-generational know-how.

On the other hand, scientific progress could be hindered by the inability to develop and commercialize a synthetic compound that has been created based upon traditional knowledge regarding the uses of a naturally occurring substance. In the case of natron, the right to prevent commercial uses might have led to an inability to engage in research and development and ultimately to obtain a patent on baking soda. Baking soda might have been created even in the absence of patent protection, but its commercialization and industrial applications could have been constrained if the consent of the Egyptians had been required. Using the two human development factors of cost and access, such a result does not appear to be consistent with the equity oriented objectives of traditional knowledge protection. Indeed, it was the increasing cost and difficulty in accessing natron that spurred the European development of a synthetic alternative.

The ability to indefinitely control the commercialization of the know-how could also affect the extent to which the public is able to utilize the knowledge-based product. If the know-how in question is not widely known, then its utility may be limited to the small group of knowledge holders in the relevant community. In such an instance, it may only be through commercialization that the public would benefit from the know-how and subsequently access traditional knowledge related goods. Consequently, in this case, control over the commercialization of such knowledge would be inconsistent with human development goals, such as accessibility and affordability with respect to traditional knowledge products. Thus, provided there are no spiritual or religious aspects to the traditional knowledge, a right that provides for control over the commercial uses of the traditional knowledge should also be time limited.

iii. What is an Adequate Term of Protection?

Even though various countries have enacted legislation to protect traditional knowledge, the implications for accessibility are different at the international level than at the domestic level.⁷⁹ An international instrument would create certain common global stan-

⁷⁸ The documentation of Indian traditional knowledge in the Traditional Knowledge Digital Library has allowed India to challenge patents on the basis of novelty or obviousness. See Janice M. Mueller, *The Tiger Awakens: The Tumultuous Transformation of India's Patent System and the Rise of Indian Pharmaceutical Innovation*, 68 U. PITT. L. REV. 491, 562 (2007).

⁷⁹ Various countries have enacted legislation to protect their traditional knowledge and cultural heritage. See, for example, WIPO Doc. GRTKF/IC/9/INF/4, Annex II, Comparative Summary of TCE Sui Generis Legislation; Ghana Copyright Act 2005, ss. 17, 44, 64 (providing perpetual protection for Ghanaian folklore); New Zealand Trade Mark Act, 2002, s. 17 (prohibiting the registration of marks that are likely to offend a segment of the community, including the Maori); Peru, Law introducing a Protection Regime for the Collective Knowledge of Indigenous Peoples Derived from Biological Resources, N° 27811, 2002 (providing *sui generis* protection for indigenous knowledge); Panama, Special Intellectual Property Regime with Respect to the Collective Rights of Indigenous Peoples to the Protection and Defense of their Cultural Identity and Traditional Knowledge Law No. 20, June 26, 2000.

dards for the protection of traditional knowledge. More importantly, any impact in terms of the ability to access and make use of traditional knowledge-related goods would have transnational implications. Because the traditional knowledge protection may have effect across national borders, a restrictive traditional knowledge right could result in traditional and indigenous groups in different countries having reduced access to one another's ancient know-how. Developing country nationals who struggle to pay for patented medicines, and copyrighted movies or musical works may find that they have to pay for items that they had not conceived of as traditional knowledge.⁸⁰

Any indefinite right granted should be relatively less restrictive in order not to upset the delicate balance between the interests of the right holder and those of the public. If the right holder could control non-commercial uses of the traditional knowledge, it could lead to absurd results. In the baking soda example, a restrictive right could enable the rights holders to prevent private and public organizations from promoting the use of baking soda for cleaning without first obtaining consent. Sellers and promoters of "natural" products that contain turmeric and promote the product based on turmeric's healing properties may require consent from the rights holder. Alternatively, they may be obligated to remunerate the rights holder for their reliance on such knowledge. This could require a complex system of tracking rights and obtaining the necessary authorizations. If the rights are perpetual, one can anticipate that an increasing number of rights would need to be respected.

Intellectual property law strives to achieve a delicate balance between users and producers by providing limited terms of protection and by creating exceptions to the rights conferred. This ensures maximum access to intangible goods while at the same time respecting the rights of creators and innovators. In order to ensure the maintenance of a vibrant public domain, a perpetual traditional knowledge right should allow for more exceptions to the rights conferred than would normally be seen in intellectual property law. This would be necessary because the scope of the traditional knowledge right is potentially extremely broad and could encompass much of the knowledge that has been generated throughout human history as well as inter-generational knowledge that continues to evolve. The downside of a perpetual right with extensive exceptions is that traditional knowledge holders might find that the right does not achieve the level of protection desired.

The other way to achieve an equitable balance with a view to ensuring access and affordability is to create a limited term of protection for traditional knowledge. If the right created allows for control over the underlying knowledge and all uses related thereto, the term of protection should be shorter, rather than longer. On the other hand, if the right

⁸⁰ See SUSAN SCAFIDI, WHO OWNS CULTURE?: APPROPRIATION AND AUTHENTICITY IN AMERICAN LAW 99–101 (2005), discussing a television narrative about the Italian origin of food products such as cappuccino, espresso, and biscotti, which are now commonly found in coffee shops around the world. Though this is a fictional account, it is illustrative of the difficulty in limiting what is considered traditional knowledge. How would an Italian claim to the method of preparing espresso or cappuccino be distinguished from other culture-based claims? If the preparation of espresso were to be considered an innovation handed down from generation to generation, there is no clear reason why it could not be considered traditional knowledge. Some concrete examples of traditional knowledge that can be attributed to Europeans include medicinal uses of silver and vinegar.

created is less exclusionary, then a longer term of protection may be appropriate. However, it would not be necessary to have a time limit on the ability to prevent the acquisition of property rights over traditional knowledge based subject matter. This prohibition on intellectual property rights could take two forms. The first would be comparable to the ability of states to refuse to grant intellectual property rights in respect of morally offensive subject matter. The second would be an application of the existing intellectual property rules, with some slight modification to allow for the consideration of traditional knowledge when determining the acquisition and enforcement of intellectual property rights.

This legal structure would be consistent with an instrumentalist approach to policy development, which has as its goals the promotion of human development factors such as access to affordable traditional knowledge related products. It would also assist traditional knowledge holders in attaining some reasonable level of protection, even if they find a limited term of protection less than ideal. However, perpetual protection over the substantive knowledge would be contrary to the human development goals of encouraging low cost access to knowledge products. In making choices that facilitate an acceptable solution, it seems more useful to create an effective right that has a limited term of protection rather than to develop a relatively weak right that will last forever.

Finally, it may be necessary to create distinct rights with varying terms of protection to account for the differences in the subject matter involved. Just as technical know-how and artistic creations require different treatment under the existing intellectual property regime, intergenerational innovations and creations may require distinct treatment in any international legal instrument that aims to protect traditional knowledge, genetic resources, and folklore.

CONCLUSION

Whether or not an intellectual property model is used to protect traditional knowledge, my argument in this article has been that useful lessons can be drawn from intellectual property law. This is because both traditional knowledge and classic intellectual property law are about the treatment of intangible goods. As is the case in classic intellectual property law, the nature of the right granted should ultimately determine the term of protection. Any right that leads to greater control over substantive knowledge should have a shorter term of protection.

This instrumentalist analysis focused on the equity-oriented objectives of traditional knowledge protection. Taking into consideration human development factors such as access to affordable traditional knowledge products, it appears that global perpetual protection of traditional knowledge would not be beneficial for developing countries or indigenous peoples. In the international context, a time-limited right would be preferable to perpetual protection of this inter-generational knowledge.