

THE ROLE OF INTERNATIONAL LAW IN PROTECTING THE TRADITIONAL KNOWLEDGE AND PLANT LIFE OF INDIGENOUS PEOPLES

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Indigenous Peoples come from the land and have been given our life through the land. We do not relate to the land we came from as property, we relate to the land as our mother . . . Our role and responsibility is to protect our Mother Earth from destruction and abusive treatment...In carrying out this responsibility since time immemorial, we have become a central component of the biological diversity of the Earth.¹

Over the past few decades, indigenous peoples around the world have stepped forward to seek recognition of their land rights and protection of their traditional knowledge and plant life through international law.² The United Nations (UN) is the principal international forum utilized by indigenous peoples who have not been successful in securing recognition of their rights within the nation-states where their territories lie.³ Their

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¹ UNITED NATIONS, ENVIRONMENT PROGRAMME, CONVENTION ON BIOLOGICAL DIVERSITY, *Preamble, Final Document of the Second International Indigenous Forum on Biodiversity*, UN Doc. UNEP/CBD/TKBD/1/3 (1997). The forum was held in Madrid, Spain from November 20-23, 1997, prior to the Workshop on Traditional Knowledge and Biological Diversity, "convened in accordance with paragraph 9 of decision III/14 of the Conference of the Parties to the Convention on Biological Diversity," also in Madrid from November 24-28, 1997, at the invitation of the Government of Spain. UNITED NATIONS, ENVIRONMENT PROGRAMME, CONVENTION ON BIOLOGICAL DIVERSITY, *Report of the Workshop on Traditional Knowledge and Biological Diversity*, UN Doc. UNEP/CBD/TKBD/1/3/ (15 Dec. 1997).

² See S. JAMES ANAYA, *INDIGENOUS PEOPLES IN INTERNATIONAL LAW* 39-73 (1996), for a full treatment of indigenous peoples in international law throughout the twentieth century. The detailed history and extensive information contained in the text and footnotes allow the reader to follow the progression of developments culminating in indigenous peoples' active participation in the modern era of human rights. For the purposes of this article, a brief summary of the post 1960s activism will be provided in the next section.

³ By 1985, the Working Group on Indigenous Populations (WGIP) had become a "major forum for indigenous peoples in the UN, attracting hundreds of indigenous representatives from every region to its yearly sessions in Geneva, Switzerland." Howard R. Berman, *United Nations Commission on Human Rights Sub-Commission on Prevention of Discrimination and Protection of Minorities: Draft United Nations Declaration on the Rights of Indigenous Peoples, Adopted, August 26, 1994*, 34 INT'L. LEGAL MATERIALS 541 (1995). The Working Group on Indigenous Populations is one of four groups under the newly-renamed Sub-Commission on the Promotion and Protection of Human

primary concern has always been and continues to be their land and its resources. The appropriation and exploitation by nation-states' and transnational corporations,⁵ who view the land and its plant, animal and mineral resources through the lens of money and profit,⁶ have caused indigenous peoples⁷ to look to international law for remedies. International forums are often the only entities working to ensure that nation-states and transnational corporations consult with indigenous peoples as a precursor

Rights (formerly the Sub-Commission on the Prevention of Discrimination and Protection of Minorities, prior to 1999), within the larger Commission on Human Rights in the United Nations' organizational structure. *United Nations Sub-Commission on the Promotion and Protection of Human Rights* (visited Nov. 4, 1999) at <http://www.unhchr.ch/html/menu2/2/sc.htm>. Established by the UN Economic and Social Council under the auspices of the Sub-Commission, the WGIP has dual mandates: (1) to annually examine the situation of indigenous peoples worldwide; and, (2) of considering the development of new international standards for the recognition and protection of indigenous rights. UNITED NATIONS HIGH COMMISSIONER FOR HUMAN RIGHTS, *Fact Sheet No. 9 (Rev.1), The Rights of Indigenous Peoples* (visited Oct. 2, 1999) available at <http://www.unhchr.ch/html/menu6/2/fs9.htm>.

⁴ See ANAYA, *supra* note 2, at 13 for a complete discussion of how the term "nation-state" evolved from the writings of Swiss diplomat Emmerich de Vattel (1714-1769) who first used the terms interchangeably. Because of this evolution, the nation-state "is a historical product, not a fact of nature. It embodies two distinct ideas of sovereignty: sovereignty as the idea of the state's supreme and independent jurisdiction over a given territory; and sovereignty as the idea that a source of legitimacy for that jurisdiction derives from the people who constitute the nation." *Id.* at 31 (quoting DAVID BEETHAM, *The Future of the Nation-State*, in *THE IDEA OF THE MODERN STATE* 209 (Gregor McLennan et al. eds., 1984).

⁵ For a list of these corporations using indigenous knowledge and plants in developing medicinal products or medicines, the majority of which are located in the United States, Australia and Western Europe, see the Rural Advancement Foundation International's (RAFI) website at <http://www.trufax.org/research/biolist.html>. RAFI's website states that the Foundation is "an international non-governmental organization headquartered in Winnipeg, Manitoba (Canada)." <http://www.rafi.org>. RAFI is dedicated to the conservation and sustainable improvement of agricultural biodiversity, and to the socially responsible development of technologies useful to rural societies. RAFI is concerned about the loss of genetic diversity - especially in agriculture - and about the impact of intellectual property rights on agriculture and world food security." *Biotechnology, Human Genome Project and Biodiversity* (visited Mar. 31, 2001) available at <http://www.trufax.org/menu/biogen.html>.

⁶ *Biological Diversity*, UN CHRON. 17, June 22, 1997. Too often, there has been little concern on the part of the nation-states or private corporations about the long-term effects of such economic and development interests. Companies holding the patents and the governments that issue them enjoy the profits that come from the companies' exclusive rights over the "biological ingredients, including genes, and the technological manufacturing process." *Id.* They "defend their right to compensation under intellectual property law for risks and expenses" incurred through research and development. *Id.*

⁷ "Indigenous communities, peoples and nations are those which, having a historical continuity with pre-invasion and pre-colonial societies that developed on their territories, consider themselves distinct from other sectors of the societies now prevailing in those territories, or parts of them. They form at present non-dominant sectors of society and are determined to preserve, develop and transmit to future generations their ancestral territories, and their ethnic identity, as the basis of their continued existence as peoples, in accordance with their own cultural patterns, social institutions and legal systems." UN SUBCOMMISSION ON PREVENTION OF DISCRIMINATION AND PROTECTION OF MINORITIES, *Study of the Problem of Discrimination against Indigenous Populations*, UN DOC. E/CN.4/SUB.2/1986/7/ADD. 4, PARA. 379 (1986), reprinted in ANAYA, *supra* note 2, at 5.

to otherwise objectionable expropriation of natural resources.* Concerning plants used for medicinal purposes, these same forces also seek to patent traditional knowledge without compensation.⁹

This article focuses on indigenous peoples' reliance on international law. Part I will provide the necessary background to understand how indigenous peoples fit within the framework of international law. An examination of how their rights are and are not addressed within the field as well as what the law currently offers regarding their relationships with nation-states and transnational corporations will be provided. Part II will look at specific international laws that directly address the concerns of indigenous peoples regarding protection of their traditional knowledge and biodiversity within their territories. These laws will be analyzed in terms of their recognition of indigenous peoples' rights as well as explore what remedies are available to these groups should they take action against a nation-state or transnational company not in compliance with international law. The main documents to be examined for the purposes of this article are: (1) International Labour Organisation Convention on Indigenous and Tribal Peoples, Convention No. 169 of 1989 (ILO Convention), one of the first major international treaties devoted to addressing indigenous peoples' rights;¹⁰ (2) Draft UN Declaration on the Rights of Indigenous Peoples (Draft Declaration),¹¹ while not yet binding, still a powerful statement of international custom; (3) the Convention of Biological Diversity (CBD),¹²

* UN CHRON., *supra* note 6.

⁹ *Id.*

¹⁰ ILO CONVENTION No. 169 was adopted by the General Conference of the International Labour Organisation on June 27, 1989 in Geneva. It entered into force on September 5, 1991 after Norway and Mexico ratified it. Since then, Bolivia, Colombia, Costa Rica, Honduras, Paraguay and Peru have also ratified the Convention. CONVENTION (NO. 169) CONCERNING INDIGENOUS AND TRIBAL PEOPLES IN INDEPENDENT COUNTRIES, adopted June 27, 1989. ANAYA, *supra* note 2, at 193-204. There have been several other declarations preceding the ILO, but they generally focused on the principles surrounding the rights of indigenous peoples without providing the detail that later documents like the ILO and most recent UN Draft Declaration do. For examples of these prior declarations, see ANAYA, *supra* note 2, at Appendix: Selected Documents.

¹¹ *Draft United Nations Declaration on the Rights of Indigenous Peoples*, UN DOC. E/CN.4/1995/2 E/CN.4/SUB.2/1994/56 pp. 105-117. Draft United Nations Declaration on the Rights of Indigenous Peoples, agreed upon by the members of the UN Working Group on Indigenous Populations at its eleventh session in Geneva, July 1993, was adopted by the UN Subcommittee on Prevention of Discrimination and Protection of Minorities by its resolution 1994/45, Aug. 26, 1994. *Id.* The Subcommittee was renamed the Sub-Commission on the Promotion and Protection of Human Rights in 1999. *United Nations Sub-Commission on the Promotion and Protection of Human Rights*, *supra* note 3.

¹² The Convention for Biological Diversity was adopted at the Nairobi Conference on May 22, 1992. The Convention was opened for signature on June 5, 1992 at the United Nations Conference on Environment and Development (the Rio Earth Summit). It remained open until June 4, 1993 and 168 countries became signatories. The Convention entered into force on Dec. 29, 1993. *Convention on Biological Diversity Clearing-House Mechanism* (visited Oct. 2, 1999) available at <http://www.biodiv.org/conv/BACKGROUND.HTML>.

containing sections which evolve out of the Draft Declaration; and (4) United Nations Sustainable Development - Agenda 21 (Agenda 21),¹³ the plan of action adopted along with the Convention of Biological Diversity at the Rio Earth Summit in 1992. Part III will feature a few case studies of indigenous peoples currently using international law to protect their traditional knowledge and plant biodiversity. I conclude that international law, although not as strong as many would like, currently provides the most effective remedy for indigenous peoples who seek to safeguard their wisdom of native plant life.

I. BACKGROUND ON INDIGENOUS PEOPLES IN INTERNATIONAL LAW

The 1970s marked the arrival of the modern human rights era. Indigenous peoples represented themselves and voiced their concerns on a wider scale throughout the world.¹⁴ From participation in international conferences and direct appeals to intergovernmental organizations to a growing body of scholarly literature that legitimated their concerns, indigenous peoples carried their demands worldwide.¹⁵ They also began "forging a transnational indigenous identity"¹⁶ by sharing experiences and information with each other as well as aligning to carry their mutual concerns regarding land rights, protection of biodiversity, and cultural preservation to the international arena. The United Nations has served, and still serves, as the forum most often utilized by indigenous peoples for these purposes.

Although not yet binding on nation-states, many look to the UN Draft Declaration on the Rights of Indigenous Peoples¹⁷ (Draft Declaration)

¹³ AGENDA 21, the Rio Declaration on Environment and Development, and the Statement of Principles for the Sustainable Management of Forests were all adopted by more than 178 governments at the UN Conference on Environment and Development held in Rio de Janeiro, Brazil, June 3-14, 1992. *United Nations Sustainable Development, Agenda 21* (visited Nov. 21, 1999) available at <http://www.un.org/esa/sustdev/agenda21chapter1.htm>. Agenda 21 focuses on sustainable development globally in the face of "worsening poverty, hunger, ill-health and illiteracy, and the continuing deterioration of the ecosystems on which we depend for our well-being." *United Nations Sustainable Development, Agenda 21: Preamble, §1.1* (visited Nov. 21, 1999) available at <http://www.un.org/esa/sustdev/agenda21chapter1.htm>. "Agenda 21 is a comprehensive plan of action to be taken globally, nationally, and locally by organizations of the United Nations System, Governments, and Major Groups in every area in which human impacts on the environment," *United Nations Sustainable Development - Agenda 21* (visited Oct. 2, 1999) available at <http://www.un.org/esa/sustdev/agenda21.html>.

¹⁴ ANAYA, *supra* note 2, at 46.

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ See *Draft United Nations Declaration on the Rights of Indigenous Peoples*, *supra* note 11 for entire

to examine rights of indigenous peoples currently represented through international custom and practice. However, a more important and binding document preceded the Draft Declaration. The International Labour Organisation Convention on Indigenous and Tribal Peoples, Convention No. 169, represents "international law's most concrete manifestation of the growing responsiveness to indigenous peoples' demands."¹⁸ It marked a change from the earlier Convention No. 107, which emanates a "philosophy of integration or assimilation."¹⁹

ILO Convention No. 169 focuses on the indigenous peoples' desire to control their own institutions and economic development as well as maintain their separate customs and beliefs.²⁰ However, when discussing the Convention's provisions, a debate erupted between the state governments and indigenous peoples over the term "peoples" and the rights conveyed by that term under international law.²¹ The two groups eventually found a compromise, resulting in a term qualifier. The term "Peoples" would only refer to the indigenous groups covered by the Convention, not conferring any rights of self-determination normally associated with the term.²²

The controversy over the term continues with the Draft Declaration adopted by the UN Subcommission in 1994. Article 3 specifically states, "indigenous peoples have the right to self-determination. By virtue of that right, they freely determine their political status and freely pursue their economic, social and cultural development."²³ Likewise, the introduction of the Draft Declaration also supports this language by listing the other UN documents that underscore this same premise.²⁴ The result of such language

text.

¹⁸ ANAYA, *supra* note 2, at 47.

¹⁹ *Id.* at 47. The earlier Convention No. 107 was adopted in 1957. *Id.*

²⁰ *Id.* at 48.

²¹ *Id.* at 48-49. Nation-states have focused on the phrase "self-determination and equal rights of peoples" in the U.N. Charter which, as Anaya points out, "has been associated with a right of independent statehood." *Id.* at 48. As such, the nation-states and indigenous groups had to seek a compromise when drafting ILO Convention No. 169 that the term "peoples" in the document would not constitute the right to self-determination as understood in international law. *Id.* at 49.

²² *Id.* at 48. The UN Charter states in Art. 1, paragraph 2, that one of the organization's purposes is "to develop friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples." BARRY E. CARTER & PHILLIP R. TRIMBLE, *INTERNATIONAL LAW: SELECTED DOCUMENTS 1999-2000 EDITION 2* (1999).

²³ DRAFT DECLARATION, *supra* note 11, at art. 3.

²⁴ *Id.* at Preamble, ¶ 14. "Acknowledging that the Charter of the United Nations, the International Covenant on Economic, Social and Cultural Rights and the International Covenant on Civil and Political Rights affirm the fundamental importance of the right of self-determination of all peoples, by virtue of which they freely determine their political status and freely pursue their economic, social and cultural development." Indigenous peoples have often relied on this Art. 1 of the International Covenant on Civil and Political Rights in pursuing their claims in international forums.

in the Draft Declaration shows the powerful presence that indigenous peoples have had in sharing their experiences with the Working Group on Indigenous Populations (WGIP) and influencing them to discontinue use of the compromise language contained in ILO Convention No. 169.

"The International Year of the World's Indigenous People"²⁵ and, then, "The International Decade" constitute more recent developments.²⁶ These resolutions by the UN General Assembly demonstrate the heightened awareness of nation-states regarding indigenous peoples' concerns. As a result, indigenous peoples now find themselves and their issues better recognized and more heavily considered in international forums.

II. WHAT DOES INTERNATIONAL LAW OFFER INDIGENOUS PEOPLES?

As previously mentioned, indigenous peoples' primary concern remains the protection of their ancestral lands and natural resources found on those lands. In recent years, international law has responded to these concerns, offering recognition of their rights, and, in some cases, even providing effective remedies. For example, Part II of the ILO Convention No. 169 specifically addresses indigenous peoples' land and protection of their natural resources. Article 13, sec. 2, defines "lands" as covering "the total environment of the areas which the peoples concerned occupy or otherwise use."²⁷ Distinction between "lands occupied" and "lands used" remains critical to indigenous peoples as oftentimes the gathering of plants, hunting, fishing, and tribal ceremonies take place on lands no longer under the control of indigenous peoples.

Similarly, introductory paragraphs to the Draft Declaration reaffirm many of the principles listed in prior declarations. The documents continue to recognize that "respect for indigenous knowledge, cultures, and traditional practices contributes to sustainable and equitable development in accordance with their aspirations and needs."²⁸ Overall, the Draft Declaration's articles differ dramatically in expressing and specifying indigenous peoples' rights than do prior conventions.

²⁵ The "International Year of the World's Indigenous People" was proclaimed in 1993. U.N.G.A. Res. 45/164 (Dec. 18, 1990). See FACT SHEET, *supra* note 3.

²⁶ The International Decade of the World's Indigenous People" began December 10, 1994. U.N.G.A. Res. 48/163 (Dec. 21, 1993). *Id.*

²⁷ ILO CONVENTION, *supra* note 10, at art. 3(2).

²⁸ *Id.* at Introduction, ¶ 9.

A. PROTECTION OF AND CONTROL OVER PLANT LIFE WITHIN THEIR TERRITORIES

As transnational corporations and governments increasingly enter indigenous territories in search of not only knowledge, but also plants necessary to make the medicines, indigenous peoples find they must turn to international law for ways to protect their native flora. Article 15 of the ILO Convention addresses the rights of indigenous peoples "to participate in the use, management, and conservation" of the natural resources pertaining to their lands.²⁹ This idea first appears in Article 6 that advises governments applying provisions of the Convention to "consult the peoples concerned" whenever national "legislative or administrative measures" may affect them directly.³⁰ The second part of Article 15 calls for states retaining rights to the "mineral or sub-surface resources" on indigenous lands to establish procedures for consultation. Before "undertaking or permitting" any "exploration or exploitation of such resources" the indigenous peoples should be consulted and, wherever possible, "participate in the benefits of such activities."³¹ This beneficial language allows indigenous peoples to protect not only their mineral resources, but their surface plant life as well.

Like ILO Convention No. 169, the UN Draft Declaration contains provisions that expressly state the rights of indigenous peoples concerning the protection of their natural resources. Article 24 specifies "the right to the protection of vital medicinal plants, animals and minerals."³² Article 28 broadens the scope of protection, mandating what states shall do in accordance with indigenous peoples' rights to conserve, restore, and protect their "total environment and productive capacity of their lands, territories, and resources."³³ It prohibits military activities in their territories without their permission.³⁴ It also confers responsibility on the nation-state to ensure "that no storage or disposal of hazardous materials" occurs within indigenous territories. Environmental racism unleashed through military

²⁹ *Id.* at art. 15.

³⁰ *Id.* at art. 6.

³¹ *Id.* at art. 15. Unfortunately, this has proven difficult to accomplish. One recent example concerns the access agreement between Costa Rica and Merck, a large pharmaceutical company, regarding plant biosamples and what benefits will go to the indigenous peoples, if any. See *Biological Diversity*, *supra* note 6.

³² DRAFT DECLARATION, *supra* note 11, at art. 24.

³³ *Id.* at art. 28.

³⁴ *Id.*

exercises and hazardous waste disposal greatly harm indigenous peoples and their native flora.³⁵

The recent Convention on Biological Diversity addressed the issue of conservation and sustainable use in Article 10.³⁶ The language helpful to indigenous peoples calls on each contracting party to "protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements."³⁷ Where the native plant life has already been degraded or compromised in some way, the Article also provides for "support of local populations to develop and implement remedial action" in the affected areas.³⁸ As the Convention has been widely accepted with 168 signatories, indigenous peoples in most countries can now rely on this treaty to bring their claims before the nation-states where they reside.³⁹

For those indigenous peoples in the Americas, the Proposed American Declaration on the Rights of Indigenous Peoples (American Declaration) offers several provisions to assist indigenous peoples.⁴⁰ Article XII recognizes indigenous peoples' rights to "the protection of vital medicinal plants, animals and minerals in their traditional territories."⁴¹ Under Article XIII, the right to "conserve, restore, and protect their environment" is coupled with the ability of indigenous peoples to create and execute conservation programs for their territories and resources.⁴² A unique addition to the Proposed Declaration provides the right to "an effective legal framework" to protect and manage the use of indigenous peoples' land and resources.⁴³ Although not yet binding, the belief exists that the American Declaration will be approved before the UN Draft Declaration.⁴⁴

³⁵ Amazon Alliance, *Indigenous Peoples Organize at WTO Meeting*, AMAZON UPDATE #53, (visited Dec. 15, 1999) available at <http://www.amazoncoalition.org/cmtupdt.htm>.

³⁶ CBD, *supra* note 12, at art. 10.

³⁷ CBD, *supra* note 12, at art. 10(c).

³⁸ *Id.*

³⁹ See *id.* for list of signatories.

⁴⁰ The Inter-American Commission on Human Rights, a branch of the Organization of American States (OAS), adopted the PROPOSED AMERICAN DECLARATION ON THE RIGHTS OF INDIGENOUS PEOPLES on Feb. 26, 1997, at its 1333rd session, 95th regular session. OEA/Ser/L/V/11.95 Doc. 6.

⁴¹ *Id.* at art. XII (2).

⁴² *Id.* at art. XIII (3) and (4).

⁴³ *Id.* at art. XVIII (4).

⁴⁴ *Indigenous activists participate in advancement of OAS Declaration*, INDIAN RIGHTS HUMAN RIGHTS, INDIAN LAW RESOURCE CENTER NEWSLETTER, Summer News 1999, Vol. 6, No. 2. (visited Feb. 2, 2000) available at http://www.indianlaw.org/body_summer_99.html. The Indian Law Resource Center (ILRC) is one of the leading advocates for the rights of indigenous peoples in the Americas. Professor S. James Anaya is Of Special Counsel to ILRC and regularly testifies before the OAS and UN on behalf of indigenous peoples and their rights.

B. PROTECTION OF AND CONTROL OVER INDIGENOUS KNOWLEDGE

In addition to protecting the plants utilized by indigenous peoples in making their medicines, international law now recognizes their right to control the dissemination of their traditional knowledge. Article 29 of the UN Draft Declaration speaks broadly of this change, entitling indigenous peoples "to the recognition of the full ownership, control and protection of their cultural and intellectual property."⁴⁵ But Article 29 goes beyond mere recognition. It also validates the need for "special measures to control, develop and protect" indigenous "sciences, technologies, and cultural manifestations."⁴⁶ Among some of those items requiring protection through special measures, Article 29 lists seeds, medicines, and "knowledge of the properties of fauna and flora."⁴⁷ The inclusion of language specifically mentioning the protection of traditional knowledge has been replicated in subsequent binding international law like the Convention on Biological Diversity.

The Convention on Biological Diversity incorporated ideas from Article 29 of the UN Draft Declaration in several of its articles. Article 8(j) serves as the primary articulation of indigenous peoples' rights for protection of their traditional knowledge and biological diversity. It states that signatories in their national legislation should "respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities."⁴⁸

In addition to Article 8(j), the inclusion of indigenous knowledge as a protected category appears throughout the Convention. Article 15 concerns access to genetic resources. Calling for prior informed consent and mutually agreed upon terms, the article seeks to establish a protocol to follow prior to allowing scientific research on genetic resources. Article 17 governs the exchange and repatriation of information "relevant to the conservation and sustainable use of biological diversity," including "indigenous and traditional knowledge."⁴⁹ Similarly, Article 18 addresses technical and scientific cooperation and "the development and use of technologies, including indigenous and traditional technologies."⁵⁰

At the same time UN member nation-states met in Rio de Janeiro to discuss the Convention on Biological Diversity, they also developed a

⁴⁵ DRAFT DECLARATION, *supra* note 11, at art. 29.

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ CBD, *supra* note 12, at art. 8(j).

⁴⁹ *Id.* at art. 17.

⁵⁰ *Id.* at art. 18(4).

plan of action known as "Agenda 21" focusing on sustainable development at the global, national and local levels.⁵¹ Chapter 26 of the Agenda is dedicated to "recognizing and strengthening the role of indigenous peoples and their communities."⁵² Section 26.1 lays out the basis for action citing the development "over many generations" of a "holistic traditional scientific knowledge" by indigenous peoples of "their lands, natural resources, and environment."⁵³ Section 26.3 offers objectives for national governments to follow in creating partnerships with indigenous peoples in sustainable development.⁵⁴ From avoiding environmentally unsound activities that indigenous peoples "consider to be socially and culturally inappropriate" to "recognition of their values, traditional knowledge, and resource management practices,"⁵⁵ nation-states should identify the contributions of indigenous peoples and their knowledge of the environment. To do so, Section 26.4 suggests governments adopt or strengthen "appropriate policies and/or legal instruments that will protect indigenous intellectual and cultural property."⁵⁶ Many countries have signed the Agenda 21 plan of action, offering indigenous peoples an additional source of protection under international law.

The Proposed American Declaration contains similar positive language. Under Article XII entitled "Health and Well-Being," indigenous peoples have the right to "legal recognition and practice of their traditional medicine"⁵⁷ Later, in Article XX, the Declaration states indigenous peoples "control, develop, and protect their science and technologies, including ... medicine, knowledge of plant and animal life. . . ."⁵⁸ Once adopted by the OAS member states, the American Declaration will codify international custom as well as put forth new international legal standards for the protection of indigenous rights.

C. RIGHT TO CONSULTATION PRIOR TO USE OR EXPLOITATION OF THEIR RESOURCES

In addition to recognition and protection of their traditional knowledge, many indigenous peoples struggle to obtain consultations with

⁵¹ AGENDA 21, *supra* note 13.

⁵² *Id.* at ch. 26.

⁵³ *Id.* at § 26.1.

⁵⁴ *Id.* at § 26.3.

⁵⁵ *Id.*

⁵⁶ *Id.* at § 26.4.

⁵⁷ AMERICAN DECLARATION, *supra* note 40, at art. XII (1).

⁵⁸ *Id.* at art. XX (2).

nation-states prior to any resource development or exploitation in their territories. The ILO Convention No. 169 addresses this dilemma in Article 7. It provides specific measures governments shall take to include indigenous peoples in "the formulation, implementation and evaluation of plans" that may directly affect them as they "have the right to decide their own priorities" when the proposed development affects their lives, beliefs and lands.⁵⁹ It specifically directs governments "to protect and preserve the environment of the territories" inhabited by indigenous peoples.⁶⁰ Article 7 suggests "governments shall ensure that, whenever appropriate," cooperative studies with indigenous peoples should be undertaken to "assess the social, spiritual, cultural, and environmental impact on them of planned development activities."⁶¹

The Draft Declaration goes even further than ILO Convention No. 169. In Article 30, it states that indigenous peoples have "the right to require that States obtain their free and informed consent prior to the approval of any project affecting their lands, territories, and other resources."⁶² However, as the Draft Declaration is not binding law, indigenous peoples can only reference it as reflecting international custom that indigenous peoples should be consulted before resource exploitation occurs.

However, the Convention on Biological Diversity and Agenda 21 carry the weight of law and incorporate much of what the Draft Declaration aims to achieve in its Chapter 26 provisions. State governments should aim at empowering indigenous peoples by recognizing their unique knowledge and incorporating them into national resource management and conservation strategies.⁶³ States should also promote the "wider application" of "indigenous knowledge, innovations, and practices" with the "approval and involvement of the holders of such knowledge, innovations and practices."⁶⁴ Informing and consulting indigenous peoples as well as including them in the decision-making process promotes better relations between the two groups.⁶⁵ In addition, sustainable development can occur in a cooperative environment where indigenous peoples share in the profits generated from their resources.

⁵⁹ ILO CONVENTION, *supra* note 10, at art. 7.

⁶⁰ *Id.*

⁶¹ *Id.* These types of cooperative efforts are explored in Part III, *infra*.

⁶² DRAFT DECLARATION, *supra* note 11, at art. 30.

⁶³ AGENDA 21, *supra* note 13, at ch. 26.3.

⁶⁴ CBD, *supra* note 12, at art. 8(j).

⁶⁵ AGENDA 21, *supra* note 13, at ch. 26.6.

D. RIGHT TO COMPENSATION FOR ANY USE OR EXPLOITATION OF THEIR RESOURCES

The lack of consultation results in indigenous peoples often receiving little or no compensation for the use of their traditional knowledge or the harvesting of their plant life. The ILO Convention refers to compensation generally in Article 15(2), stating "the peoples concerned shall wherever possible participate in the benefits of such activities."⁶⁶ It also calls for "fair compensation for any damages" suffered by the indigenous peoples resulting from development.⁶⁷

Article 30 in the Draft Declaration builds upon the foundation laid in the ILO Convention. It provides for the right of indigenous peoples to "determine and develop priorities and strategies for the development and use of their lands, territories, and other resources."⁶⁸ After consulting with indigenous peoples and securing an agreement, Article 30 mandates "just and fair compensation" for any "development, utilization or exploitation" of their natural resources.⁶⁹ Similarly, both Articles 8(j) and 15(7) in the Convention on Biological Diversity "encourage the equitable sharing of the benefits arising from the knowledge, innovations, and practices" of indigenous peoples.⁷⁰ Regardless of the Convention's language, indigenous peoples still face difficulty receiving compensation for the use of their knowledge or exploitation of their resources, plant or otherwise.

III. EXAMINING REMEDIES THROUGH CASE STUDIES

Traditional indigenous peoples are not just databases to squeeze and discard once science and large multinationals have extracted what they believe are the only important elements of their cultures. The data or indigenous knowledge base is valuable only as long as the living system of knowledge exists. Data is only viable if the people who have the expertise to use it are still alive. People make the system, not the data in and of itself.⁷¹

⁶⁶ ILO CONVENTION, *supra* note 10 at art. 15(2).

⁶⁷ *Id.*

⁶⁸ DRAFT DECLARATION, *supra* note 11, at art. 30.

⁶⁹ *Id.*

⁷⁰ CBD, *supra* note 12, at arts. 8(j) and 15(7).

⁷¹ Lahe'ena'e Gay, *Of Stories With Uncertain Endings*, 36 UN CHRON. (1999) available at <http://www.un.org/pubs/chronicle/1999/issue3/0399p.39.html>. The Chronicle published excerpts from a paper she presented on April 10, 1997 to the UN Commission on Sustainable Development.

A. APPLICATION: RELATIONSHIPS WITH NATION-STATES AND TRANSNATIONAL CORPORATIONS

Having examined the relevant international laws and customs concerning indigenous knowledge and resource use, the practicality of applying and enforcing the language contained within them arises. While the provisions exist, the broad and often vague wording leaves the implementation open to interpretation.

The language of the ILO Convention No. 169 largely frames its provisions in terms of what governments need to do in conjunction with indigenous peoples. The Draft Declaration, in contrast, begins nearly all of its 45 articles with the phrase "Indigenous peoples have the right to . . ."⁷² which shows the influence of a stronger, vocal indigenous presence at the United Nations than existed when the ILO Convention No. 169 was adopted in 1989. Agenda 21 provides specific measures that state governments can undertake to include indigenous peoples in the design and implementation of programs and policies.⁷³

But do nation-states and transnational corporations actually apply the conventions and declarations to protect indigenous knowledge and plant life? It often depends on from which side one views the application.

A recent case in India shows how both sides view the application differently. In 1998, the UN honored the Director of the Tropical Botanical Garden and Research Institute (TBGRI) in southern India for "going by the book" in developing plants for medicinal use and sharing the profits with the Kani tribe.⁷⁴ The tribe which assisted the TBGRI in gathering the plant disagreed with the UN's assessment. The tribe claims that the institute cheated them "of profits made from the industrial production of a medicinal plant [*arogyappacha*] grown by the tribe."⁷⁵ The TBGRI markets "Jeevani," a very successful health tonic with *arogyappacha*⁷⁶ as the main ingredient.

Killed by abductors in March 1999 while visiting Colombia, Ms. Gay had traveled there on behalf of indigenous peoples' rights. She served as Chairwoman and President of the Pacific Cultural Conservancy.

⁷² See generally DRAFT DECLARATION, *supra* note 11.

⁷³ AGENDA 21, *supra* note 13, at ch. 26.

⁷⁴ "Other biodiversity advocates also believe the UN erred for commending the institute for applying the provisions of the CBD that concern sharing profits from commercial uses of plant life with indigenous people who have nurtured and developed that biodiversity," J. John and Sindhu Menon, *Tribe Accuses Biologists of Stealing Knowledge*, INTER PRESS SERVICE, Aug. 6, 1998, available in LEXIS, Inter Press Service File.

⁷⁵ *Id.*

⁷⁶ *Id.* The plant name of *arogyappacha* is *Trichopus Zeylanicus* sub sp. *Travancoricus* Burkill ex Narayanan. For an example of a marketed product containing "Jeevani" and another ingredient

With the money received from the company currently marketing the product, TBGRI set up and now administers the Kani Tribal Trust on behalf of the tribe.⁷⁷ Tribal leaders and medicine practitioners complained that the profits deposited in the trust and "channeled through private monopoly" did not reach them.⁷⁸ In 1999, the TGBRI paid the first annual disbursement to the tribe, the modest sum of \$12,500.⁷⁹ Although they have since paid compensation, TBGRI's correct application of the CBD's Article 15 appears doubtful since the organization created the trust without the tribe's permission.⁸⁰

Another recent case stems from a biodiversity program conducted by the University of Arizona in the Patagonia region of Argentina where over 60,000 Mapuche Indians live. The University contracted with the Argentina's National Institute for Agrarian Technology (INTA) in 1993 to gather plant specimens with those revealing medicinal properties to be further studied.⁸¹ The Mapuche argue that the contract violates Article 8(j) of the CBD, which provides for the protection of indigenous knowledge in addition to consultation and compensation when such knowledge is utilized.⁸² They contend they have no way to verify what will be done with their plants collected or the knowledge they have shared.⁸³ Even INTA's Director, Enrique Suarez, acknowledged that there is "no guarantee that [rights for the plants] will reach the indigenous groups."⁸⁴ If plants collected "contained properties that could be developed,"⁸⁵ the division of rights provides five percent for INTA, five percent for Patagonica University, and fifty percent for

gathered from indigenous peoples in Peru, see *Pinnacle Adrenerlin*, (visited Mar. 31, 2001), available at <http://www.bodybuilding.com/store/pin/adrenerlin.html>.

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ Chris Kilham, *It's Payback Time for Indigenous Peoples*, NATURAL FOODS MERCHANDISER (Dec. 2000 Issue), (visited Mar. 31, 2001) available at http://www.healthwellexchange.com/nfm-online/nfm_backs/Dec_00/payback.cfm.

⁸⁰ *Id.* Art. 15 of the CBD concerns whether the contracting party [in this case, the Kani tribe] gave "prior informed consent" to TBFRI before the institute gained access to and conducted research on genetic resources, i.e. the *arogyappacha* plant, provided by the tribe. CBD, *supra* note 12, at art. 15(5).

⁸¹ The collection of plants ended in the late summer of 1998. Over 500 species had been collected from the region at that time. Marcela Valente, *Problems with Patents on Indigenous Knowledge*, INTER PRESS SERVICE, May 12, 1998, available in LEXIS, Inter Press Service File. According to RAFI's list of bioprospectors and biopirates, American Cyanamid, a large pharmaceutical company based in the United States, is also involved in this contract. See *supra* note 5.

⁸² AGENDA 21, *supra* note 13, at art. 8(j).

⁸³ Renowned for their knowledge of the healing properties of plants, the Mapuche claim the project has pillaged plant species, extorted information from indigenous groups in exchange for food, and failed to guarantee that royalties will be distributed to native communities. Valente, *supra* note 81.

⁸⁴ *Id.*

⁸⁵ *Id.*

the region where the resource was found.⁸⁶ The full extent of the contract's compliance or violation of the CBD will be "revealed in years to come" as the University conducts research on the plants' medicinal properties and possibly seeks to develop that knowledge.⁸⁷

There are entities perceived as applying the principles of the CBD for the benefit of native peoples. A partnership between Bristol-Myers-Squibb and Conservation International⁸⁸ to gather plants for five years with the Trio, an Amazonian tribe in Surinam, may lead to new therapeutic medicines.⁸⁹ Conservation International views the partnership as an economic advantage for the tribe, "providing [an] alternative to logging and mining in the rainforests, and to help protect biodiversity and indigenous peoples' knowledge of traditional medicine."⁹⁰ Keeping the details of the contract confidential, it is unclear what portion of the profits these two groups will return to the tribe. The joint venture between Shaman Pharmaceuticals⁹¹ and Eli Lilly⁹² to search for "new antifungal compounds from rain forest plants" pledges to return a percentage of any profits to the

⁸⁶ Patagonica University also participated in the collection of plant specimens. Concerning distribution of profits to the indigenous peoples, the burden falls on the provincial governments receiving the fifty percent of rights. There is no specific provision within the contract to compensate the indigenous peoples for sharing their knowledge of the plants. *Id.*

⁸⁷ *Id.*

⁸⁸ MARK J. PLOTKIN, Ph.D., *TALES OF A SHAMAN'S APPRENTICE: AN ETHNOBOTANIST SEARCHES FOR NEW MEDICINES IN THE AMAZON RAIN FOREST* 286-87 (1993). Conservation International is a nonprofit organization based in Washington, D.C. that promotes biodiversity conservation in rain forests and other ecosystems around the world.

⁸⁹ *Id.* at 287. See also BBC ONLINE NETWORK, *World: Americas - Tribal Cures for Modern Ailments* (August 28, 1999) (visited Apr. 2, 2001) available at http://news.bbc.co.uk/1/hi/english/world/americas/newsid_431000/431829.stm.

⁹⁰ BBC ONLINE NETWORK, *supra* note 89.

⁹¹ Shaman Pharmaceuticals, located in San Carlos, California, grew out of a conversation between Lisa Conte and Mark Plotkin, an ethnobotanist affiliated with Conservation International. According to Plotkin, Shaman Pharmaceuticals has garnered the "support of indigenous rights advocates and venture capitalists, as well as recruit[ed] a staff that includes ethnobotanists, biochemists, and physicians." PLOTKIN, *supra* note 88, at 286. Conte established a nonprofit organization, Healing Forest Conservancy, "set up expressly to return a percentage of all profits that flow from potential medicinal products" back to the indigenous peoples who instruct researchers about the plants and to the countries in which the plants grow. The money received by the countries supports the "development and management of national parks and protected areas." *Id.* at 286-87.

⁹² The firm of Eli Lilly markets the rosy periwinkle alkaloids, still considered the "most effective treatment for certain cancers." *Id.* at 287. Annual sales of the two cancer fighting drugs produced from this plant exceed \$100 million, but not one cent goes back to poverty-stricken Madagascar, the plant's country of origin. *Id.* at 16. This scenario is unfortunately all too common among pharmaceuticals seeking to develop new products. Numerous organizations now work to combat this injustice, assisting indigenous peoples in protecting the intellectual property rights of the medicinal plants in their territories, such as Rural Advancement Foundation International, Amazon Alliance, Center for International Environmental Law (CIEL), Indian Law Resource Center, and Coordinating Body for the Indigenous Organizations of the Amazon Basin (COICA). A useful resource guide in this area is an edited book by TOM GREAVES, *INTELLECTUAL PROPERTY RIGHTS FOR INDIGENOUS PEOPLES: A SOURCEBOOK* (1994).

native peoples.⁹³ Several countries have also introduced specific legislation concerning access to genetic resources and profit sharing as advised by the CBD.⁹⁴ The actual success of these endeavors remains to be seen.

B. IMPLEMENTATION: QUESTIONS OF ENFORCEABILITY

Although the conventions may not always be interpreted by nation-states and transnational corporations in the light most favorable to the interests of indigenous peoples, mechanisms of enforcement do exist. Returning to the language of ILO Convention No. 169, Article 6 addresses the need to incorporate indigenous peoples into the larger state governmental structure where they can "freely participate, to at least the same extent as other sectors of the population."⁹⁵ Appearing to go beyond mere voting rights, Article 6 advocates their involvement "at all levels of decision-making" in both the elective or administrative institutions responsible "for policies and programmes which concern them."⁹⁶ It further advises the government to assist indigenous peoples in developing their own institutions and initiatives, providing the necessary resources if appropriate.⁹⁷

Beyond the ILO Convention, the Organization of American States (OAS) has recently opened its proceedings to participation by indigenous peoples.⁹⁸ Similarly, the Inter-American Commission on Human Rights, organized under OAS, named an indigenous representative to its delegation.⁹⁹ Even more exciting to native communities, OAS invited thirty indigenous leaders, lawyers and indigenous rights activists to participate in a meeting of government envoys organized by the Committee on Political and Juridical Affairs of the OAS Permanent Council from February 10-13, 1999.¹⁰⁰ Those invited made statements supporting OAS's proposed American Declaration on the Rights of Indigenous Peoples.¹⁰¹ Later that

⁹³ PLOTKIN, *supra* note 88, at 286-87.

⁹⁴ Some of the countries introducing legislation include the Philippines, Australia, the Andean Pact countries (Bolivia, Colombia, Ecuador, Peru and Venezuela), Brazil, Cameroon, Fiji, Guatemala, India and Malaysia. CBD, *supra* note 12.

⁹⁵ ILO CONVENTION, *supra* note 10, at art. 6.

⁹⁶ *Id.*

⁹⁷ *Id.*

⁹⁸ INDIAN RIGHTS HUMAN RIGHTS, INDIAN LAW RESOURCE CENTER NEWSLETTER, Summer News 1999, (visited Feb. 2, 2000) available at http://www.indianlaw.org/body_summer_99.html.

⁹⁹ Unlike the UN where non-governmental organizations (NGOs) participate in the Working Group on Indigenous Peoples, the OAS has not allowed much participation of indigenous peoples in their proceedings. So the announcement of an indigenous representative is a significant development in the relationship between OAS and indigenous peoples. *Id.*

¹⁰⁰ *Id.*

¹⁰¹ The Proposed American Declaration on the Rights of Indigenous Peoples constitutes the "minimum

year, the Inter-American Court of Human Rights took the Mayagna community of Awas Tingni's case against the Nicaraguan government upon the recommendation of the Inter-American Commission on Human Rights.¹⁰²

The attention generated by the Awas Tingni's litigation against Nicaragua invoked another mechanism recently enacted to assist indigenous peoples. In 1991, the World Bank announced its Operational Directive 4.20 (OD 4.20) describing Bank policies and procedures for projects that affect indigenous peoples.¹⁰³ The objective of OD 4.20 is "to ensure that indigenous peoples do not suffer adverse effects during the development process, particularly from Bank-financed projects, and that they receive culturally compatible social and economic benefits."¹⁰⁴ As a result of the litigation between the Awas Tingni and Nicaragua, the World Bank has put pressure on the Nicaraguan government to bring itself into compliance with international human rights standards as a condition of its continuing assistance to the country.¹⁰⁵

Additionally, the US Patent and Trademark Office's (PTO) cancellation of a patent for the *ayahuasca* plant on November 3, 1999, elated indigenous leaders from nine South American countries who petitioned the PTO to reject the patent.¹⁰⁶ The *ayahuasca* plant is used in sacred ceremonies by indigenous peoples throughout the Amazon region.¹⁰⁷ The PTO rejected the patent based on the publications describing the plant as "known and available" prior to the filing of the patent application.¹⁰⁸ However, indigenous leaders and advocates for indigenous peoples have called on the PTO to

standards for the survival, dignity and well-being of the indigenous peoples of the Americas." AMERICAN DECLARATION, *supra* note 40, at art. XXIV.

¹⁰² The Inter-American Court of Human Rights' decisions are binding upon those countries that submit to its jurisdiction. The case involves Nicaragua ignoring the Awas Tingni's [an indigenous group within Nicaragua] request for demarcation of its lands. The government did not consult the tribe before permitting others to cut timber on the land. Nicaragua's Constitution requires that "indigenous lands be demarcated and otherwise formally recognized including the right of indigenous communities to manage natural resources found on their lands." *Nicaragua is sued before the Inter-American Court of Human Rights*, INDIAN RIGHTS HUMAN RIGHTS, INDIAN LAW RESOURCE CENTER NEWSLETTER, Winter News 1999, Vol. 6, No. 1. (visited Feb. 3, 2000) available at http://www.indianlaw.org/body_winter_99.html.

¹⁰³ *The World Bank Group, Indigenous Peoples Operational Directive* (visited Mar. 31, 2001) available at <http://wbln0018.worldbank.org/Institutional/Manuals/OpManual.nsf/ODirw/0F7D6F3F04DD70398525672C007D08ED?OpenDocument>.

¹⁰⁴ *Id.* The World Bank consults with indigenous peoples to make sure they understand the provisions of OD 4.20 and gather feedback on how to improve the current policies it lays out.

¹⁰⁵ *Id.* Since the implementation of OD 4.20, this has become the World Bank's practice.

¹⁰⁶ *U.S. Patent Office Admits Error, Cancels Patent on Sacred "Ayahuasca" Plant*, (visited Dec. 3, 1999) available at <http://www.scitec.auckland.ac.nz/~king/Preprints/boook/diversit/extra/ayap.htm>.

¹⁰⁷ *Id.*

¹⁰⁸ *Id.*

change its rules and develop a system to prevent the patenting of indigenous peoples' intellectual property rights in the future.¹⁰⁹ This type of action should be taken by all nation-states who have yet to draft laws and policies putting their country in step with current international law. While some pharmaceuticals have taken the step to share profits from their new drug products with indigenous peoples, laws mandating corporations to do so and that also protect the traditional knowledge of indigenous peoples are required.

IV. CONCLUSION

The inclusion of indigenous peoples' rights in international law over the past thirty years has helped indigenous peoples form coalitions and petition national governments and international bodies to change policies that undermine the integrity of their traditions, beliefs, and territories. The ILO Convention No. 169, UN Draft Declaration, Convention on Biological Diversity and Agenda 21 are examples of the positive change that has resulted from the inclusion of indigenous peoples in the nation-states' international forums. However, nation-states and transnational companies eager to reap profits from developing indigenous peoples' traditional knowledge of plant life into commercial medicines are often slow to comply with the guidelines set forth in many international conventions and declarations. While the political and financial power of state governments and transnational corporations can often allow those two groups to disregard indigenous peoples' concerns, the presence and inclusion of indigenous peoples in international forums counters the ability of any sovereign or company to overlook their demands. Similarly, the ability of indigenous groups to share information over the Internet and receive news reports about other native communities creates alliances between these groups. Although frustrating for indigenous peoples, the present political reality is one of access to the UN, OAS, and The World Bank Group where networking and coalition building assist in ongoing struggles, offering international visibility.

¹⁰⁹ *Id.*