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Articles

International Investment Law: Origins, Imperialism and Conceptualizing the Environment

Kate Miles*

ABSTRACT

This paper explores the origins of international investment law and their implications for foreign investment protection law and policy in the twenty-first century. International rules on the protection of foreign-owned property emerged in the context of imperialism during the seventeenth to early twentieth centuries. This paper argues that these origins are of fundamental importance to the shape and character of modern international investment law. They still resonate within its principles, structures, conceptualizations, and dispute resolution systems. As such, this paper examines the historical context in which core principles of this area of the law were developed, the methodologies of imposition, and the more recent manifestations of this traditional relationship between foreign investors, the environment of the host state, and international law. This paper also argues that a reorientation of the focus and principles of international investment law may assist in developing a more balanced conceptualization of this area for the twenty-first century—and, in so doing, may bring about a break from its current pattern of reproducing economic imperialism.

I. INTRODUCTION

International investment law cannot be separated from its socio-political environment. Indeed, the political context from which it emerged determined its core character. International investment law is a product of the global expansion of European trade and investment activity during the seventeenth to early twentieth centuries. It emerged

from an international legal system established amongst European nations and evolved through the “colonial encounter”¹ as a tool to protect the interests of capital-exporting states.² By the mid-nineteenth century, international investment principles had materialized, claiming universality and neutrality, but largely consisting of protection for investors and obligations for capital-importing states to facilitate trade and investment.³

This Article argues that these origins still inform the substance of modern international investment law and that it remains imbued with the essential character of imperialism. Formative influences and conceptualizations remain alive in the international investment law of the twenty-first century and can be seen in its sole focus on investor protection, its lack of responsiveness to the impact of investor activity on the local communities and environment of the host state, the alignment of home state interests with those of the investor, the categorization of public welfare regulation as a treaty violation, and the commodification of the environment in host states for the use of foreign entities.

Addressing this manifestation of the past, however, may be possible through a reorientation of the focus and principles of international investment law so as to engage with the interests of host states as well as those of investors. Concrete steps toward this reorientation include the insertion into treaties of new measures enabling the host state to invoke international investment agreements for damage suffered as a result of the activities of foreign investors. It would also entail the inclusion of provisions preserving host state autonomy on matters of public welfare regulation, the development of socially responsible investment principles, and the redrafting of “Objectives” provisions to promote foreign investment for the purposes of sustainable development. These

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1. ANTONY ANGHIE, *IMPERIALISM, SOVEREIGNTY AND THE MAKING OF INTERNATIONAL LAW* 6–7 (2004). Anghie conceptualizes the doctrines, principles, and institutions of international law as products of the interaction between colonizer and colonized, that is, the legal resolution to problems arising within the colonial context. He coins the phrase “colonial encounter” to encapsulate this process.

2. CHARLES LIPSON, *STANDING GUARD: PROTECTING FOREIGN CAPITAL IN THE NINETEENTH AND TWENTIETH CENTURIES* 4, 8, 37–38 (1985); NICO SCHRIJVER, *SOVEREIGNTY OVER NATURAL RESOURCES: BALANCING RIGHTS AND DUTIES* 173–74 (1997); PETER MALANCZUK, *AKEHURST’S MODERN INTERNATIONAL LAW* 91–100 (7th ed. 1997).

3. LIPSON, *supra* note 2, at 37–38; ANGHIE, *supra* note 1, at 224, 238–39.

steps may help to create more balanced international investment agreements.

Part II of this Article examines the origins of international investment law. It considers the socio-political era in which core elements of international investment law were developed and argues that the political and commercial aspirations of Western trading and capital-exporting states had a profound effect on the character of investment law. Part III explores the way in which these origins manifest in modern international investment law and argues that its current principles remain deeply entwined with the political interests of capital-exporting states. It provides a critique of this modern framework and argues for a new conceptualization of international investment law.

Ultimately, this Article argues that capital-exporting states will play a crucial role in progressing this new conceptualization of international investment law and suggests concrete steps toward such a reorientation. The next ten years of foreign economic policy and the international outlook of major capital-exporting states, such as the United States, will be vital in determining whether or not international investment law will remain locked in a pattern of reproducing economic imperialism or will move toward a more balanced conceptualization for the twenty-first century.

II. THE POLITICAL ORIGINS OF INTERNATIONAL INVESTMENT LAW

International rules on the protection of foreign-owned property originated from reciprocal arrangements between European states.⁴ These states possessed relatively equal bargaining power and sought to secure reciprocal minimum standards of treatment for their citizens engaged in investment activity within the region.⁵ The transformation into international investment law, however, changed the character of the rules fundamentally. The process of applying these standards to non-European states became inextricably linked with colonialism, oppressive protection of commercial interests, and military intervention.⁶ Foreign investment protection law moved from a base in reciprocity to one of imposition.

4. LIPSON, *supra* note 2, at 11–12; *see also* H. NEUFELD, *THE INTERNATIONAL PROTECTION OF PRIVATE CREDITORS FROM THE TREATIES OF WESTPHALIA TO THE CONGRESS OF VIENNA (1648–1815)* 6 (1971); FRANK GRIFFITH DAWSON & IVAN L. HEAD, *INTERNATIONAL LAW, NATIONAL TRIBUNALS, AND THE RIGHTS OF ALIENS* 4–5 (1971).

5. LIPSON, *supra* note 2, at 11–12.

6. *Id.*; DAWSON & HEAD, *supra* note 4, at 5.

The emergence of international legal rules regulating trade and investment was not a process of creating legal regimes on a blank canvas. Rather, there were political and jurisdictional contests at work and existing legal systems vying for supremacy.⁷ Ultimately, it was the European form and content of international law, along with its particular conceptions of property, private wealth, economy, and regulation, which emerged out of this contest as the foundation for the modern international legal system.⁸ Lauren Benton argues that this emergence of international law from European legal regimes is intimately bound with power relations.⁹ She identifies the creation and control of legal bodies and laws with social, political, and economic control, stating that “legal institutions emerged with capitalist relations of production through repetitive assertions of power and responses to power.”¹⁰

Benton’s insight is also critical in understanding the interplay of power and the development of legal rules that form the basis of the modern system of international law protecting foreign investment. Her suggestion that disputes over property in a colonial context were also about the imposition of power, jurisdictional primacy, and the creation of legal regimes rather than solely concerned with the minutiae of the particular property rights involved,¹¹ provides an important perspective on the dynamics of the era and an understanding of the origins of international investment law—the emergence of these rules involved a dual process of assertion and creation. Through the assertion of foreign investment protection rules as existing international law, together with the use of force, capital-exporting states directed the evolution of international investment law toward a system that protected only the investor.

A. *Origins in Imposition*

Non-European legal regimes and inter-nation trading and investment systems were ultimately replaced with a universal system of international law based on European conceptions of property — and power struggles and legal doctrine were involved in that process of replacement. The strategies included the securing of Friendship, Commerce, and Navigation Treaties, the acquiring of concessions, diplomatic pressure, capitulation treaties, extraterritorial jurisdiction,

7. LAUREN BENTON, LAW AND COLONIAL CULTURES: LEGAL REGIMES IN WORLD HISTORY 1400–1900, 10–11 (2002).

8. ANGHIE, *supra* note 1, at 32–33; LIPSON, *supra* note 2, at 16, 20–21.

9. BENTON, *supra* note 7, at 10–11.

10. *Id.* at 11.

11. *Id.*

military intervention, and colonial annexation of territory.¹² And this process of Western commercial and political expansionism was facilitated by international law.

1. Friendship, Commerce, and Navigation Treaties

Friendship, Commerce, and Navigation Treaties have been described as the forerunners of modern bilateral investment treaties.¹³ These agreements granted reciprocal commercial privileges, but also addressed a wide range of subjects relating to the treatment of nationals of the state parties.¹⁴ They focused on protecting individuals and their property; ensuring freedom of movement and worship; assuring rights to trade and to engage in commercial enterprise; granting national treatment and most-favored-nation status; allowing for access to ports; and granting navigation rights through territorial waters.¹⁵ These agreements created a network of reciprocal trade protection measures and formed a framework for international protection of foreign capital.¹⁶

Extending the principles embodied in these agreements beyond Europe, however, altered their character from one of reciprocity to one of enforced compliance.¹⁷ Although initially concluded on equal terms, these agreements often became the first stepping-stone in establishing a more intrusive presence within non-European nations.¹⁸ As the political strength of the non-European partner waned, overly favorable investor interpretations of these treaties were imposed on the host state¹⁹ and incursions into their sovereignty systematically increased in scale and scope so as to further trade and investment activity.²⁰ This gradual

12. LIPSON, *supra* note 2, at 12–21; M. SORNARAJAH, *THE INTERNATIONAL LAW ON FOREIGN INVESTMENT* 19–21, 209–10 (2d ed. 2004); SCHRIJVER, *supra* note 2, at 173–75.

13. SORNARAJAH, *supra* note 12, at 209.

14. LIPSON, *supra* note 2, at 96; SORNARAJAH, *supra* note 12, at 209–10; SCHRIJVER, *supra* note 2, at 190; Dieter Blumenwitz, *Treaties of Friendship, Commerce and Navigation*, in *ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW* 953, 953–55 (Rudolf Bernhardt ed., 1992–2002).

15. SORNARAJAH, *supra* note 12, at 209–10; SCHRIJVER, *supra* note 2, at 190; Blumenwitz, *supra* note 14. *See generally* Treaty of Friendship, Commerce and Navigation, U.S. –Paraguay, Feb. 4, 1859, in 2 W. M. MALLOY, *TREATIES, CONVENTIONS, INTERNATIONAL ACTS, PROTOCOLS AND AGREEMENTS BETWEEN THE UNITED STATES AND OTHER POWERS 1776–1909*, 1364–69 (1910).

16. LIPSON, *supra* note 2, at 9.

17. *Id.* at 12–14.

18. ANGHIE, *supra* note 1, at 85–86.

19. LIPSON, *supra* note 2, at 13–14. Lipson discusses this process by using the example of increasingly assertive European investors in Ottoman territories and the imposition of their interpretation of commercial treaties during the decline of the Ottoman Empire.

20. ANGHIE, *supra* note 1, at 84–86.

process of cementing Western economic and political control of non-European territories was facilitated through the granting of far-reaching concessions to foreigners, the extraterritorial application of European and American law to their nationals, and the imposition of "unequal treaties."²¹

2. *Unequal Treaties*

"Unequal," or capitulation, treaties conferred one-sided rights and were the product of actual or threatened use of force by the dominant Western commercial powers of the day.²² They addressed a number of issues, but were designed to prise open reluctant non-European territories to Western trade and investment.²³ Ostensibly, they were treaties of cession entered into voluntarily between states, but the neutrality of the language disguised the imposed nature of the agreement and the brutality inflicted to secure financial benefits for European states, traders, and investors.²⁴ The use of these treaties were part of the European framing of freedom of commerce as a "right," the protection of which justified the use of force.²⁵ Regarding refusal as a "hostile act," Western states constructed a legal entitlement to redress militarily a non-European nation's refusal to trade or to allow foreign nationals to engage in commercial activity within its territory.²⁶ As such, conflict followed by the imposition of unequal treaties was a key legal strategy in the realization of European territorial and commercial aspirations.²⁷

Quintessential examples of unequal treaties were those concluded between China and foreign powers from the 1840s to the 1860s at the end of military conflict.²⁸ These agreements granted a series of

21. *Id.* at 67–74, 84–86; LIPSON, *supra* note 2, at 12–14, 16.

22. SORNARAJAH, *supra* note 12, at 20; LIPSON, *supra* note 2, at 13–14; SCHRIJVER, *supra* note 2, at 174; Werner Morvay, *Unequal Treaties*, in *ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW*, *supra* note 14, at 1008–09.

23. LIPSON, *supra* note 2, at 13–14. These treaties addressed issues such as the protection of Christian missionaries, travel prerogatives for foreign nationals, concessions, and governance powers.

24. ANGHIE, *supra* note 1, at 72–73.

25. *Id.* at 20–22, 67–74, 270–71.

26. *Id.*

27. *Id.* at 72–74.

28. LIPSON, *supra* note 2, at 14. *See generally* Treaty of Nanking, 1842, U.K.-China, 93 Consol. T.S., 465; Treaty of Wang Hya, China-U.S., 1844, 97 Consol. T.S., 105; Treaty of Whampoa, China-Fr., 1844, 97 Consol. T.S., 375; Treaty of Tientsin, China-Russ., 1858, 119 Consol. T.S., 113; Treaty of Tientsin with the German States, 1861, 124 Consol. T.S., 299; Treaty of Peking, China-Austria-Hung., 1869, 139 Consol. T.S., 477, in Morvay, *supra* note 22, at 1008 (examples of treaties between China and foreign states referred to in the text).

nonreciprocal rights and established areas of extraterritorial jurisdiction.²⁹ In this way, regimes of exclusive consular rule were created within the territory of the host state, under which foreign nationals and their property were not subject to local laws, but remained within the jurisdiction of their home state.³⁰ This mode of governance was humiliating for host states, effectively setting up what Nico Schrijver describes as “ ‘quasi-colonies’ of Western powers, companies or even individuals.”³¹ Imposed systems of this nature were a source of great resentment amongst the local citizens of states subjected to unequal treaties.³²

Unequal treaties were demonstrations of political dominance and were wide-ranging in scope, ensuring social and political conditions that would provide an enhanced level of security for pursuing foreign trade and investment.³³ They addressed issues such as travel prerogatives of foreign traders, the securing of extensive trading and investment rights, nondiscriminatory commercial access to the host state, granting concessions to foreign companies, protection of Christian missionaries, leasing or ceding of territory to foreign states, and governance powers.³⁴ The acquired governance powers were extensive, often entailing both civil and criminal jurisdiction, allowing foreign officials to determine matters involving local citizens as well as foreign nationals.³⁵

Establishing direct consular control proved to be effective for ensuring the security of foreign-owned property and the continued expansion of foreign business interests.³⁶ Extraterritoriality virtually guaranteed the application of a European conceptualization of international law on foreign investment protection.³⁷ And direct consular rule enabled the level of control necessary to enforce that conceptualization of property rights.³⁸ Not only were diplomatic avenues explored when circumstances arose that might threaten foreign trade and investment interests, but “strong-arm” tactics and “gunboat diplomacy” were also employed.³⁹ European powers, particularly Britain due to its

29. LIPSON, *supra* note 2, at 14.

30. SCHRIJVER, *supra* note 2, at 174; LIPSON, *supra* note 2, at 14.

31. SCHRIJVER, *supra* note 2, at 174.

32. SORNARAJAH, *supra* note 12, at 20; SCHRIJVER, *supra* note 2, at 174–75.

33. LIPSON, *supra* note 2, at 14–15.

34. SCHRIJVER, *supra* note 2, at 174; LIPSON, *supra* note 2, at 14; Morvay, *supra* note 22, at 1009.

35. LIPSON, *supra* note 2, at 14.

36. *Id.*

37. *Id.*

38. *Id.*

39. *Id.* at 14–15. The term “gunboat diplomacy” is used to describe the European practice of coercion via a show of military force to obtain commercial or political

naval prowess, were well-placed to enforce their view of the legal rights of their nationals, and they did so when they deemed it necessary to protect their nationals and their interests.⁴⁰ And this dominance was used to obtain jurisdictional control, extensive trading rights, and far-reaching concessions to foreigners.⁴¹

3. *Concessions*

Concession agreements were generally concluded between a host state and an individual or company and allowed the concessionaire to engage in an activity that had previously been under the sole realm of the state.⁴² This ordinarily entailed the extraction of natural resources and the construction and operation of public utilities, such as postal systems and railways.⁴³ The rights obtained through concession agreements were often extensive, involving jurisdictional control of substantial areas of land and significant natural resources for lengthy terms, in return for payment of royalties.⁴⁴ The scope of individual agreements varied, and although this type of arrangement often concerned only an isolated enterprise, it still effectively involved the transfer of sovereign rights held by the state to the holder of the concession.⁴⁵ These agreements were often exploitative, occurring pursuant to unequal treaties or within protectorates, and were procured through the exertion of pressure from Western states seeking favorable concessions for their nationals.⁴⁶

advantages.

40. B. A. WORTLEY, *EXPROPRIATION IN PUBLIC INTERNATIONAL LAW* 58 (1959); Richard B. Lillich, *The Current Status of the Law of State Responsibility for Injuries to Aliens*, in *INTERNATIONAL LAW OF STATE RESPONSIBILITY FOR INJURIES TO ALIENS* 1, 3 (Richard B. Lillich ed., 1983); LIPSON, *supra* note 2, at 14, 40, 53–54, 187. Lipson refers to 40 incidents involving British armed intervention in Latin America between 1820 and 1914 to protect its citizens against injury and seizure of property, in addition to numerous examples of threatened use of force.

41. SCHRIJVER, *supra* note 2, at 174–75.

42. Peter Fischer, *Historic Aspects of Concession Agreements*, in *STUDIES IN THE HISTORY OF THE LAW OF NATIONS* 222, 224–25 (C. H. Alexandrowicz ed., 1972); *see also* Kenneth S. Carlston, *Concession Agreements and Nationalization*, 52 *AM. J. INT'L L.* 260, 260 (1958).

43. Fischer, *supra* note 42, at 224; Carlston, *supra* note 42, at 260.

44. SORNARAJAH, *supra* note 12, at 40–42.

45. *Id.* at 40–42, 405–06; SCHRIJVER, *supra* note 2, at 174–75.

46. SORNARAJAH, *supra* note 12, at 40–42, 405–06; SCHRIJVER, *supra* note 2, at 174–75; Antony Anghie, *“The Heart of My Home”: Colonialism, Environmental Damage, and the Nauru Case*, 34 *HARV. INT'L L.J.* 445, 472–73 (1993). A protectorate was a regime under which a non-European state was under the protection of a European power. Technically, the protectorate retained control of its internal affairs, while the European state spoke for it on the international stage and took control of any external matters relating to the protectorate; ANGHIE, *supra* note 1, at 87–88.

Once obtained, concessions were protected by the military strength of the home state and any coercive action taken was legitimized by international rules on investment protection.⁴⁷ Despite their blanket invocation by capital-exporting states, these rules were still in the process of emerging. These legal principles became part of the process of building and maintaining Western economic and political dominance and evolved into imposed assertions of universally applicable international law as the colonial encounter unfolded.⁴⁸ As such, the invocation of international property rights by concessionaires and their reiteration by the home state were at once assertions of the existent law and also part of creating its principles.

4. *Implications for Modern International Investment Law*

The gradual process of securing Western commercial and political hegemony from the seventeenth to the nineteenth century was facilitated through trading networks, colonial expansion, military conflict, imposition of capitulation treaties, the granting of extensive concessions to foreigners, and the establishment of extraterritorial jurisdiction within non-European territories.⁴⁹

It was also facilitated by international law. Scholars argue that international legal doctrines were developed and molded to legitimize the use of oppressive techniques by European powers throughout the colonial encounter.⁵⁰ The formulation of categories such as “civilized” and “uncivilized” nations enabled the application of a different conceptualization of international law to non-European territories; one that applied a concept of “otherness” to non-European communities and enabled their exclusion.⁵¹ Antony Anghie argues that concepts such as

47. SORNARAJAH, *supra* note 12, at 40; SCHRIJVER, *supra* note 2, at 174–75; LIPSON, *supra* note 2, at 53–57.

48. ANGHIE, *supra* note 1, at 4–10, 67–69, 211–15.

49. *Id.* at 67–74, 84–86; LIPSON, *supra* note 2, at 12–14, 16.

50. ANGHIE, *supra* note 1, at 3–12; MARTTI KOSKENNIEMI, *THE GENTLE CIVILIZER OF NATIONS: THE RISE AND FALL OF INTERNATIONAL LAW 1870–1960* 126–30 (2002); Antony Anghie, *Finding the Peripheries: Sovereignty and Colonialism in Nineteenth-Century International Law*, 40 HARV. INT’L L.J. 1 (1999) [hereinafter *Finding the Peripheries*]; Christopher Weeramantry & Nathaniel Berman, *The Grotius Lecture Series*, 14 AM. U. INT’L L. REV. 1515, 1555–69 (1999); Peter Fitzpatrick, *Terminal Legality: Imperialism and the (De)composition of Law*, in *LAW, HISTORY, COLONIALISM: THE REACH OF EMPIRE* 9 (Diane Kirkby & Catharine Colebourne eds., 2001); see James Thuo Gathii, *Imperialism, Colonialism, and International Law*, 54 BUFF. L. REV. 1013 (2007).

51. ANGHIE, *supra* note 1, at 9–10; KOSKENNIEMI, *supra* note 50, at 126–30; Fitzpatrick, *supra* note 50; Anghie, *supra* note 46, at 447; see *Finding the Peripheries*, *supra* note 50. The concept of “otherness” is also referred to in Diane Kirkby &

sovereignty, statehood, territory acquisition, and treaty-making acquired new meanings and evolved so as to further European expansionist objectives in engaging with non-European nations.⁵² He argues further that these origins are not simply historical, but continue to inform the modern conceptualization of sovereignty doctrine.⁵³

Anghie's theories also implicate the development of international investment law. The translation of European trading and investment principles into universal rules of international law on foreign investment protection is bound up with the history of colonialism and the calculated, frequently brutal, use of force and manipulation of legal doctrines to acquire commercial benefits.⁵⁴ These historical circumstances drove the construction of international investment law. Legal principles were developed and used by capital-exporting states to legitimize their often repressive actions in acquiring commercial advantages and protecting property.⁵⁵ Certainly, examples of capricious behavior by host states can be found and there were individual circumstances in which the property of foreign investors needed protection.⁵⁶ The key point, however, is more generalized and conceptual than any one property dispute—it is of fundamental importance to the shape and character of international investment law that the context in which its principles were developed was one of exploitation and imperialism. The rules evolved so as to advance the interests of Western capital-exporting states engaging with the non-European world, and, as such, they protected only the investor.⁵⁷ The colonial encounter created “otherness” in the concept of the host state, excluding it from the protective principles of international

Catharine Coleborne, *Introduction, in*, LAW, HISTORY, COLONIALISM: THE REACH OF EMPIRE, *supra* note 50, at 4.

52. ANGHIE, *supra* note 1, at 3–12, 65–114; Anghie, *supra* note 46, at 448; *Finding the Peripheries*, *supra* note 50.

53. ANGHIE, *supra* note 1, at 3–12; Anghie, *supra* note 46, at 447–49, 505–06; *see Finding the Peripheries*, *supra* note 50; *see also* David Kennedy, *International Law and the Nineteenth Century: History of an Illusion*, 17 QUINNIPIAC L. REV. 99, 127–38 (1997) (discussing the complexities of the relationship between, and perceptions of, nineteenth and twentieth century international legal doctrine).

54. ANGHIE, *supra* note 1, at 211–16; LIPSON, *supra* note 2, at 12–16; SORNARAJAH, *supra* note 12, at 20.

55. ANGHIE, *supra* note 1, at 3–10, 67–74; SCHRIJVER, *supra* note 2, at 173–76; SORNARAJAH, *supra* note 12, at 19–20.

56. SORNARAJAH, *supra* note 12, at 21, 458–59. Sornarajah cites as an example the expropriation of the railway by the Portuguese government in the *Delagoa Bay Railroad Arbitration*. *See* 2 JOHN BASSETT MOORE, A HISTORY AND DIGEST OF THE INTERNATIONAL ARBITRATIONS TO WHICH THE UNITED STATES HAS BEEN A PARTY 1865 (1898) for a discussion of the Delagoa Bay Arbitration.

57. ANGHIE, *supra* note 1, at 3–10, 67–74; LIPSON, *supra* note 2, at 12–16; SCHRIJVER, *supra* note 2, at 173–76; SORNARAJAH, *supra* note 12, at 19–20.

investment law. The host state was, and remains, unable to call upon the rules of international investment law to address damage suffered at the hands of foreign investors.⁵⁸

The principles of foreign investment protection law formed an integral part of European commercial and political expansionism in the eighteenth and nineteenth centuries and they validated the use of force to achieve those objectives.⁵⁹ Referring to this role, Charles Lipson states, “nineteenth-century international property law, developed in Europe and enforced elsewhere mainly by the British, was undeniably successful in its central task. It legitimated, regulated, and obscured well enough to permit the internationalization of capital.”⁶⁰

Those rules and principles form the basis of modern international investment law. Although the repressive origins are not apparent from the neutral tenor of international legal terminology, they are imbued within the core of foreign investment protection law. The impact of colonial “otherness” can still be felt. These origins are responsible for the inherent investor bias of international investment law in the twentieth and twenty-first centuries. They find a modern manifestation in its excessive focus on the rights of the investor, its obsessive promotion of foreign investment to the exclusion of the interests of the host state and of other stakeholders, the manner in which it is used by foreign investors and their states to secure commercial interests, and the investor-state arbitral system of dispute resolution.⁶¹

58. SORNARAJAH, *supra* note 12, at 184–85. For examples of how recent scholarship has turned attention to the mechanisms through which home state obligations for the activities of corporate nationals can be created, see SORNARAJAH, *supra* note 12, at 169–203. See also JENNIFER A. ZERK, *MULTINATIONALS AND CORPORATE SOCIAL RESPONSIBILITY: LIMITATIONS AND OPPORTUNITIES IN INTERNATIONAL LAW* (2006); Robert McCorquodale & Penelope Simons, *Responsibility Beyond Borders: State Responsibility for Extraterritorial Violations by Corporations of International Human Rights Law*, 70 *MOD. L. REV.* 598 (2007).

59. ANGHIE, *supra* note 1, at 3–10, 67–74; LIPSON, *supra* note 2, at 16, 53–57; SCHRIJVER, *supra* note 2, at 173–76; SORNARAJAH, *supra* note 12, at 19–20.

60. LIPSON, *supra* note 2, at 57.

61. For a discussion of these issues, see Luke E. Peterson, *All Roads Lead Out of Rome: Divergent Paths of Dispute Settlement in Bilateral Investment Treaties*, in *INTERNATIONAL INVESTMENT FOR SUSTAINABLE DEVELOPMENT: BALANCING RIGHTS AND REWARDS* 123 (Lyuba Zarsky ed., 2005); Philippe Sands, Concluding remarks, *Searching for Balance: Colloquium on Regulatory Expropriations in International Law*, 11 *N.Y.U. ENVTL. L.J.* 198, 204–05 (2002); M. Sornarajah, *The Clash of Globalizations and the International Law on Foreign Investment: The Simon Reisman Lecture in International Trade Policy*, 10 *CAN. FOREIGN POL'Y* 1 (2003); Kyla Tienhaara, *What You Don't Know Can Hurt You: Investor-State Disputes and the Protection of the Environment in Developing Countries*, 6 *GLOBAL ENVTL. POL.* 73, 80, 85–87 (2006).

B. *Alignment of State Interests with Investor Interests*

Aligning the interests of private investors with those of their home state is a practice with a long history and politics at its heart. In the era of European expansionism, this association went well beyond invoking rules on diplomatic protection, and gave rise to a relationship of interdependency and an intermingling of the functions of state and investor.⁶² Not only did imperialist and commercial objectives merge in this relationship, but the major European trading companies also played an active role in the development of international legal doctrine favorable to their needs.⁶³ The clearest historical examples of this type of relationship are those between the state and entities such as the English, Dutch, and French East India Companies.

1. *Trading Companies and the Development of International Law*

In the seventeenth century, an innovative technique was adopted to pursue state interests through the activities of a select group of trading companies—the granting of sovereign rights and privileges to the English East India Company, the Dutch East India Company (“VOC”), and the Dutch West India Company.⁶⁴ This approach effectively created new international legal doctrine enabling non-sovereign actors to operate in the international sphere.⁶⁵ In possessing delegated sovereign powers, these companies were entitled to enter treaties, found and administer settlements, engage in military conquest, and build forts.⁶⁶ They were expected to reflect and further their home states’ political positions in their overseas operations, as well as in their own dealings with trading companies from other European states.⁶⁷

Initially, the VOC, English East India Company, and French East India Company followed different policies in their approach to obtaining commercial advantages in new territories.⁶⁸ For example, at the outset, in contrast to its rival trading companies, the English East India Company

62. See Claudia Schnurmann, “Wherever Profit Leads Us, to Every Sea and Shore . . .”: the VOC, the WIC, and Dutch Methods of Globalization in the Seventeenth Century, 13 *RENAISSANCE STUD.* 474, 477–80 (2003) (discussing the relationship between state and the Dutch East India Company, Dutch West India Company, and English East India Company).

63. SORNARAJAH, *supra* note 12, at 39; ANGHIE, *supra* note 1, at 68–69.

64. Schnurmann, *supra* note 62, at 477–80; ANGHIE, *supra* note 1, at 68.

65. ANGHIE, *supra* note 1, at 68.

66. Schnurmann, *supra* note 63, at 477–80.

67. LUCY SUTHERLAND, *THE EAST INDIA COMPANY IN 18TH CENTURY POLITICS* 4–5 (1952).

68. *Id.* at 2–5.

sought out trading rights without incurring the associated administrative and political burdens of formal annexation of territory.⁶⁹ However, this changed in the face of amongst other things, Britain's trading and political rivalries with other European states.⁷⁰ And by the late eighteenth century, its primary object had shifted away from commercial enterprise and instead had become one of imperial acquisition and management.⁷¹ As such, the activities of the English East India Company reflected its relationship with the government, manifesting in a blurring of its commercial interests with the political objectives of the state. Certainly, in the case of the VOC and English East India Company, the entwining of state and Company interests influenced the actions of both parties.

These relationships also influenced the development of international investment law. Not only were international rules on foreign investment protection developed to protect the imperialist and commercial interests of European capital-exporting states and their nationals, but trading companies were also actively involved in the development of relevant international legal doctrines.⁷² Indeed, Hugo Grotius, regarded as an objective legal theorist and described as “the father of international law,” was in fact engaged as a legal advisor to the VOC.⁷³ Far from embodying a disinterested representation of the law, a number of his most significant theories were developed to provide a legal basis for the activities of the VOC.⁷⁴ For example, *De Iure Praede* (the law of prize and booty) and *De Mare Liberum* (the doctrine of the freedom of the high seas) were devised by Grotius to legitimize the capture of a Portuguese ship, *Santa Catarina*, and the confiscation of its spectacularly valuable cargo by a Dutch merchant fleet belonging to the VOC.⁷⁵

69. *Id.* at 2–3.

70. *Id.* at 2–5.

71. C. H. PHILIPS, *THE EAST INDIA COMPANY: 1784–1834* 23 (1961).

72. SORNARAJAH, *supra* note 12, at 39, 185, 271–73; ANGHIE, *supra* note 1, at 68, 224.

73. ANGHIE, *supra* note 1, at 68, 224; SORNARAJAH, *supra* note 12, at 39, 271–73; Ileana M. Porras, *Constructing International Law in the East Indian Seas: Property, Sovereignty, Commerce and War in Hugo Grotius' De Iure Praede—The Law of Prize and Booty, or “On How to Distinguish Merchants from Pirates,”* 31 *BROOK. J. INT'L L.* 741, 742–43, 744–47 (2006).

74. Porras, *supra* note 73, at 744–47; SORNARAJAH, *supra* note 12, at 39, 271–73; ANGHIE, *supra* note 1, at 224; Martine Julia Van Ittersum, *Hugo Grotius in Context: Van Heemskerck's Capture of the Santa Catarina and its Justification in De Iure Praedae (1604–1606)*, 31:3 *ASIAN J. SOC. SCI.* 511 (2003).

75. Porras, *supra* note 73, at 744–47; SORNARAJAH, *supra* note 12, at 39; Van Ittersum, *supra* note 74; Peter Borschberg, *The Seizure of the Sta. Catarina Revisited: The Portuguese Empire in Asia, VOC Politics and the Origins of the Dutch-Johor Alliance (1602–c.1616)*, 33 *J. SE. ASIAN STUD.* 31, 32, 57 (2002).

The VOC adopted aggressive tactics designed to eliminate commercial rivals and to ensure the political dominance of the Dutch. It combined military activities with the extraction of exclusive trading rights from local rulers, actively seeking to lock out both the Portuguese and the English.⁷⁶ It was also this process of welding warfare and commerce that produced new international legal doctrine and embedded private commercial interests deep within the notion of the national interest.⁷⁷ Ileana Porras argues that these militarized encounters between private trading companies initiated the creation of new international law to justify the state's protection of private commercial interests.⁷⁸ She argues that Hugo Grotius' treatise, *De Iure Praedae*, elevated the protection of commerce to a level commensurate with the national identity, stating that "commerce inhabits every inflection of the text."⁷⁹ Grotius framed his arguments for the VOC in such a way that a threat to private commercial interests became a legitimate legal basis for the state to go to war. In so doing, he ensured that the historical trajectories of warfare, commerce, and the development of international law would be inextricably intertwined.⁸⁰

The creation of rules in international investment law employed a similar level of self-justification and reiteration of the enmeshed interests of state and private commerce. This was affected through the development of the doctrine of diplomatic protection of alien property in the nineteenth century. Again, international legal doctrine was utilized to serve the interests of capital-exporting states. In essence, the development of these rules in the nineteenth century was a continuation of the path set by the VOC, its rival trading companies, and their home states.

2. *The Law of Diplomatic Protection of Alien Property*

Foreign investment protection law in the nineteenth century developed within a branch of international law known as the diplomatic protection of aliens.⁸¹ It established an international minimum standard

76. Niels Steensgaard, *The Dutch East India Company as an Institutional Innovation*, in *DUTCH CAPITALISM AND WORLD CAPITALISM* 243–46 (Maurice Aymard ed., 1982); JAN DE VRIES & AD VAN DER WOUDE, *THE FIRST MODERN ECONOMY: SUCCESS, FAILURE, AND PERSEVERANCE OF THE DUTCH ECONOMY, 1500–1815*, 385 (1997); Douglas A. Irwin, *Mercantilism as Strategic Trade Policy: The Anglo-Dutch Rivalry for the East India Trade*, 99 *J. POL. ECON.* 1296, 1300 (1991); see also Borschberg, *supra* note 75, at 33–34; Van Ittersum, *supra* note 74, at 511–20.

77. Porras, *supra* note 73, at 802–04.

78. *Id.*

79. *Id.* at 803.

80. *Id.* at 802–04.

81. IAN BROWNLIE, *PRINCIPLES OF PUBLIC INTERNATIONAL LAW* 524–26 (2003).

for the treatment of foreigners, including foreign companies, and addressed the protection of their person and property while abroad.⁸² A breach of those rules entailed international state responsibility and triggered a right of intervention by the home state.⁸³

Locating foreign investment protection within this doctrine necessarily linked the activities of state and investor within the very nature and operation of the law. The doctrine was premised on the theory that an injury done to a foreigner was an injury to his or her state, and, as such, enabled the home state to take action on its national's behalf.⁸⁴ The response elicited from the home state varied.⁸⁵ The options open to an injured state ranged from diplomatic protest to military intervention; however, the ultimate method of enforcement chosen by a government depended on the political and economic issues involved in the matter.⁸⁶ If the home state decided to take no action, the investor was left with no avenue for recovery of any losses.⁸⁷

International law on the treatment of alien property started from the position that on entering and carrying on business in the host state, the alien had submitted to the application of local jurisdiction.⁸⁸ This presumption was then tempered by rights held under the principles of diplomatic protection, which included the protection of international minimum standards of treatment.⁸⁹ Uncompensated expropriation of the property of aliens fell within this category and enlivened a right of intervention.⁹⁰ Although property disputes within colonial territories—

82. C. F. AMERASINGHE, *STATE RESPONSIBILITY FOR INJURIES TO ALIENS* 38, 56 (1967); EDWIN BORCHARD, *THE DIPLOMATIC PROTECTION OF CITIZENS ABROAD* 25–29, 39–42 (1919); DAWSON & HEAD, *supra* note 4, at 10; CLYDE EAGLETON, *THE RESPONSIBILITY OF STATES IN INTERNATIONAL LAW* 3, 6, 22 (1928); PHILIPPE SANDS, *LAWLESS WORLD: AMERICA AND THE MAKING AND BREAKING OF GLOBAL RULES* 123 (2003); SORNARAJAH, *supra* note 12, at 138.

83. AMERASINGHE, *supra* note 82, at 56; BORCHARD, *supra* note 82, at 25–29, 39; EAGLETON, *supra* note 82, at 3, 6, 22; SORNARAJAH, *supra* note 12, at 138.

84. SORNARAJAH, *supra* note 12, at 138. This doctrine was articulated in the 18th century by E. DE VATTEL, *THE LAW OF NATIONS*, Book II, ch. VI 136 (1758) (“[w]hoever ill-treats a citizen injures the State, which must protect that citizen.”)(translation).

85. BORCHARD, *supra* note 82, at 439–56; DAWSON & HEAD, *supra* note 4, at 10–11; LIPSON, *supra* note 2, at 53; WORTLEY, *supra* note 40, at 58.

86. BORCHARD, *supra* note 82, at 439–56; DAWSON & HEAD, *supra* note 4, at 10–11; LIPSON, *supra* note 2, at 53; WORTLEY, *supra* note 40, at 58; SANDS, *supra* note 82, at 123.

87. SANDS, *supra* note 82, at 124.

88. BORCHARD, *supra* note 82, at 28–29; BROWNLIE, *supra* note 81, at 526.

89. *See* BORCHARD, *supra* note 82; L. OPPENHEIM, *INTERNATIONAL LAW: A TREATISE* 374 (1905–1906).

90. BORCHARD, *supra* note 82, at 439–56; B. CHENG, *GENERAL PRINCIPLES OF LAW AS APPLIED BY INTERNATIONAL COURTS AND TRIBUNALS* 47–49 (1987); ISI FOIGHEL,

including those involving traders and investors—tended to be dealt with by the colonial authorities and their court systems,⁹¹ this continuous form of localized legal engagement was an on-going process of asserting, creating, and reinforcing the dominance of imperial state law and its conceptualization of property rights.⁹² This also means, however, that nineteenth century case law on international expropriation is largely located outside the formal colonial context.⁹³ As such, significant case law arose out of the relationship of informal imperialism between Latin American states and the United States and Europe. Examples include *The Delagoa Bay Railroad Arbitration*,⁹⁴ *The Venezuelan Arbitrations*,⁹⁵ and *The United States and Paraguay Navigation Company Claim*.⁹⁶ These cases, and the arguments presented during their hearings, illustrate the way in which assertions of international legal doctrine, together with the use of armed force, were used by capital-exporting states to create principles during this formative period of international investment law.

The international rules on investment protection that emerged from these cases regarding expropriation, international minimum standards, compensation requirements, and the use of force as an appropriate response to alleged breaches of these rules, were heavily weighted toward the investor and structured to favor the interests of capital-exporting states. These rules formed the basis of modern investment principles and the approach underlying contemporary international investment agreements. With the enmeshing of state and investor interests in the principles of diplomatic protection, capital-exporting states were able to exert control over the investment protection process. Furthermore, they could also ensure that their wider commercial and political objectives were met. However, this level of control over the shape of the law was not universally accepted at the time of its

NATIONALIZATION AND COMPENSATION 76 (1964); ZOUHAIR KRONFEL, PROTECTION OF FOREIGN INVESTMENT: A STUDY ON INTERNATIONAL LAW 28 (1972); LIPSON, *supra* note 2, at 37–38, 53, 80; MALANCZUK, *supra* note 2, at 9–10; WORTLEY, *supra* note 40, at 33–35; Josef Kunz, *The Mexican Expropriations*, Pamphlet 1, N.Y.U. SCH. L. CONTEMP. PAMPHLETS SERIES, 31 (1940).

91. SORNARAJAH, *supra* note 12, at 19–20; *see also* BENTON, *supra* note 7, at 134, 161–66 (discussing the authority of English East India Company officials to preside over revenue and property disputes in India and on the role of imperial law in redefining property in India and French West Africa); John C. Weaver, *The Construction of Property Rights on Imperial Frontiers: The Case of the New Zealand Purchase Ordinance of 1846*, in LAW, HISTORY, COLONIALISM: THE REACH OF EMPIRE, *supra* note 50, at 221.

92. BENTON, *supra* note 7, at 161–66; *see also* Weaver, *supra* note 91, at 221.

93. SORNARAJAH, *supra* note 12, at 19–21.

94. *See* MOORE, *supra* note 56, at 1865.

95. *See* JACKSON H. RALSTON, VENEZUELAN ARBITRATIONS OF 1903 (1904).

96. MOORE, *supra* note 56, at 1485.

formation—although the application of international minimum standards was strongly asserted and enforced by capital-exporting states, it was contested, in particular, by Latin American states.⁹⁷

a. National Treatment v. International Minimum Standard

An attempt by host states to ameliorate the unbalanced nature of international property rules manifested in the assertion of the national standard rule. Advocates of this rule argued that it was an infringement of territorial sovereignty to cloak an alien with rights and privileges that placed them in a better position than citizens of the host state.⁹⁸ In other words, aliens should be afforded no more than equal treatment with local citizens. Those promoting the international minimum standard argued that this national standard rule simply may not provide sufficient protection for foreign investors and that international legal obligations were not to be determined by reference to the domestic laws of individual states.⁹⁹ It was considered an inadequate response to allegations of violations of the international minimum standard to argue that the host state treats its own citizens in like fashion.¹⁰⁰ However, from the 1860s, Latin American host states were persistent advocates of the national standard rule. Registering their dissatisfaction with the imposed international rules protecting alien property and with the abuse of the diplomatic protection system by capital-exporting states, they adopted a position that came to be called the Calvo Doctrine.¹⁰¹

97. BROWNLIE, *supra* note 81, at 526–27; SCHRIJVER, *supra* note 2, at 177–78.

98. BROWNLIE, *supra* note 81, at 526–27.

99. See, e.g., Secretary of State Baynard to Mr. Connery, November 1, 1887, in *Compilation of Reports of Committee on Foreign Relations, U.S. Senate*, 751, 753 (1887), reprinted in Alexander P. Fachiri, *Expropriation and International Law*, 6 BRIT. Y.B. INT'L L. 159, 163 (1925):

If a Government could set up its own municipal laws as the final test of its international rights and obligations, then the rules of international law would be but the shadow of a name, and would afford no protection either to states or to individuals. It has been constantly maintained and also admitted by the Government of the United States that a Government cannot appeal to its municipal regulations as an answer to demands for the fulfilment of international duties.

100. L. OPPENHEIM, *INTERNATIONAL LAW* 495–96 (3d ed., 1920); BORCHARD, *supra* note 82, at 37–39; BROWNLIE, *supra* note 81, at 527–29.

101. SCHRIJVER, *supra* note 2, at 177–78; LIPSON, *supra* note 2, at 76–77; SORNARAJAH, *supra* note 12, at 37–39, 141–46; DONALD SHEA, *THE CALVO CLAUSE: A PROBLEM OF INTER-AMERICAN AND INTERNATIONAL LAW AND DIPLOMACY* 5, 12–13 (1955) (discussing one of the most prominent advocates of the Calvo position, the Argentinean lawyer and legal scholar, Carlos Calvo, after whom the doctrine is named. He completed a six-volume treatise, *LE DROIT INTERNATIONAL THÉORIQUE ET PRATIQUE*, first published in 1868, and then, five editions later, in its final form in 1896).

b. Latin American Dissent: The Calvo Doctrine

The Calvo Doctrine questioned the legality of the invocation of diplomatic protection and involved two main propositions: (1) the doctrine of state sovereignty precludes states from intervening in the affairs of another, both diplomatically and by force; and (2) aliens should be afforded no more than the same treatment as nationals and must limit themselves to filing claims in the local judicial system.¹⁰²

The goal of the Calvo Doctrine was to eradicate the ever-present threat of foreign state intervention triggered by investor, trader, or settler disputes.¹⁰³ Manifesting in the insertion of provisions in treaties, national constitutions, municipal legislation, and private contracts with foreigners, this was an attempt by host states to shape international legal doctrine so as to protect their interests.¹⁰⁴ It was unsuccessful.¹⁰⁵ As the propositions did not find favor with the international legal community in Europe and the United States, the Latin American attempt to propel the Calvo Doctrine into an accepted rule of international law was dismissed.¹⁰⁶ The legitimizing authority of international legal status was withheld by capital-exporting states from a rule that did not serve their commercial or political interests.

3. *Implications for Modern International Investment Law*

Political and commercial aspirations from the seventeenth to nineteenth centuries led to the collaboration of capital-exporting states with their nationals engaging in trade and foreign investment. This historical alignment of state interests with those of foreign investors, and in particular with those of the trading companies, together with their

102. DAWSON & HEAD, *supra* note 4, at 15; SCHRIJVER, *supra* note 2, at 178; SHEA, *supra* note 101, at 19; Wenhua Shan, *From "North-South Divide" to "Private-Public Debate": Revival of the Calvo Doctrine and the Changing Landscape in International Investment Law*, 27 NW. J. INT'L L. & BUS. 631, 632 (2007).

103. SHEA, *supra* note 101, at 30.

104. *Id.* at 21–27.

105. *Id.*

106. *Id.* at 20; Shan, *supra* note 102, at 632. The following resolution of the Institute of International Law in 1910 typified the general response to the Calvo Doctrine:

The Institute of International Law recommends that states should refrain from inserting in treaties clauses of reciprocal irresponsibility. It thinks that such clauses [sic] are wrong in excusing states from the performance of their [sic] duty [sic] to protect their nationals abroad and their duty to protect foreigners within their own territory.

JOHN BASSETT MOORE, A DIGEST OF INTERNATIONAL LAW: AS EMBODIED IN DIPLOMATIC DISCUSSIONS, TREATIES AND OTHER INTERNATIONAL AGREEMENTS, INTERNATIONAL AWARDS, THE DECISIONS OF MUNICIPAL COURTS, AND THE WRITINGS OF JURISTS 323–24 (1906).

influence over the development of international property rules, meant that those laws represented the interests of capital-exporting states and their nationals. These rules appeared in treaties and emerged as customary international law on the diplomatic protection of alien property. And they ultimately formed the basis of many of the protections guaranteed under modern international investment agreements. For example, the nineteenth century focus on investor protection can be seen in the “objectives” provisions of many bilateral investment treaties,¹⁰⁷ the conditions under which expropriation may take place and the interpretation in recent arbitral awards of the fair and equitable treatment standard.¹⁰⁸ Further manifestations include non-discrimination requirements, the pre-establishment application of national treatment obligations, the lack of any avenue of recourse for the host state within investment treaties for damage suffered as a result of investor activities, and the character of investor-state dispute resolution mechanisms.

This substantive emphasis on investor protection is mirrored in the current decentralized system for the resolution of investor-state disputes. Comprised of *ad hoc* arbitral tribunals, the framework for investor-state dispute resolution has a commercial emphasis. It utilizes confidentiality requirements that are more appropriate to the hearing of purely commercial disputes.¹⁰⁹ The very structure of the dispute settlement model is based on private commercial dispute resolution,¹¹⁰ and, as such, is not currently a system designed to accommodate adequate consideration of the social, environmental, ethical, and human rights issues that arise in investor-state disputes.¹¹¹ This has given rise to allegations of systemic “investor bias” in the determination of investment

107. Objectives of bilateral investment treaties are often listed as increasing levels of foreign investment and of ensuring high protection of investments. See GUS VAN HARTEN, *INVESTMENT TREATY ARBITRATION AND PUBLIC LAW* 121, 136–38 (2007); HOWARD MANN ET AL., *INTERNATIONAL INSTITUTE FOR SUSTAINABLE DEVELOPMENT, IISD MODEL INTERNATIONAL AGREEMENT ON INVESTMENT FOR SUSTAINABLE DEVELOPMENT: NEGOTIATORS’ HANDBOOK* 2, 4 (2d ed. 2006), http://www.iisd.org/pdf/2005/investment_model_int_handbook.pdf; UNCTAD, *Investment and Enterprise Development Programme, Foreign Direct Investment*, <http://www.unctad.org/Templates/StartPage.asp?intItemID=2527&lang=1> (last visited Sept. 15, 2008).

108. See, e.g., *Tecnicas Medioambientales Tecmed S.A. v. United Mexican States*, 43 I.L.M. 133 (ICSID 2003) (Award); *Occidental Exploration and Prod. Co. v. Republic of Ecuador*, No. UN3467 (London Ct. of Int’l Arb. 2004) (Final Award); *Azurix Corp. v. Argentine Republic*, 43 I.L.M. 262 (ICSID 2006) (Award).

109. VAN HARTEN, *supra* note 107, at 159.

110. Sornarajah, *supra* note 61, at 13–17; Kyla Tienhaara, *Third Party Participation in Investment-Environment Disputes: Recent Developments*, 16 REV. EUR. CMTY & INT’L ENVTL L. 230, 230 (2007).

111. Sornarajah, *supra* note 61, at 17.

disputes,¹¹² and, as a whole, the system continues to suffer from consistency, transparency, and legitimacy problems.¹¹³

The historical alignment of state interests with those of their investors has led to a twenty-first century system of international investment law that emphasizes investor protection to the exclusion of other competing considerations. It also has a more explicit manifestation in the continued close alignment of the interests of foreign investors with the activities of their home states. This aspect is discussed in detail in Part III of this Article.

C. Imperialism, Investment, and the Environment of the Host State

This section considers the relationship of early traders, investors, and colonizers with the environment of host states and argues that this historical mode of interaction has shaped the modern relationship between foreign investors and the environment. It argues that the environmental practices of European traders, investors, and settlers in the seventeenth to nineteenth centuries shaped the narrow conceptualization of the environment reflected in modern international investment law—essentially that of a commodity for exploitation.

The ecological conditions within host states and colonized territories were obviously very different as between the many settlements and trading posts across non-European nations.¹¹⁴ As such, individual interactive experiences of those environments varied, were to a certain extent driven by location-specific factors, and also often involved different forms of imperialist control.¹¹⁵ However, despite the individual

112. Christian J. Tams, *An Appealing Option? The Debate about an ICSID Appellate Structure*, 57 *ESSAYS IN TRANSNAT'L ECON. L.* 31–33 (2006), available at <http://www.wirtschaftsrecht.uni-halle.de/Heft57.pdf>.

113. See, e.g., the *Lauder Cases* in which inconsistent decisions were delivered on the same issues and facts: In the Matter of a UNCITRAL Arbitration between Ronald S. Lauder and the Czech Republic (Final Award, Sept. 3 2001); *CME Czech Republic B.V. v. Czech Republic (Neth. v. Czech Rep.)*, (Partial Award, Sept. 13, 2001) (Final Award, Mar. 14, 2003). See also the discussion in Charles N. Brower et al., *The Coming Crisis in the Global Adjudication System*, 19 *ARB. INT'L* 415 (2003). For an in-depth discussion of these issues, see VAN HARTEN, *supra* note 107.

114. Timothy F. Flannery, *The Fate of Empire in Low- and High-Energy Ecosystems*, in *ECOLOGY AND EMPIRE: ENVIRONMENTAL HISTORY OF SETTLER SOCIETIES* 46, 46 (Tom Griffiths & Libby Robin eds., 1997).

115. John M. MacKenzie, *Empire and the Ecological Apocalypse: The Historiography of the Imperial Environment*, in *ECOLOGY AND EMPIRE: ENVIRONMENTAL HISTORY OF SETTLER SOCIETIES*, *supra* note 114 at 222; David Lowenthal, *Empires and Ecologies: Reflections on Environmental History*, in *ECOLOGY AND EMPIRE: ENVIRONMENTAL HISTORY OF SETTLER SOCIETIES*, *supra* note 114 at 229.

variants, these colonial encounters with the environment were experienced by the traders, investors, and settlers through the lens of their own European culture.¹¹⁶ Although they adapted to the local context, their fundamental understanding of the land and its inhabitants was created through Western expansionist eyes.¹¹⁷ And it was that vision that shaped imperial natural resource extraction, local environmental regulatory regimes, and the displacement of indigenous communities from their land.¹¹⁸ The effects of this imperial perspective are still felt in the land management regulations of post-colonial societies¹¹⁹—and they still resonate in modern international investment rules.

European expansionism from the seventeenth to the nineteenth centuries sought to use the land of non-European territories and extract the raw materials in a process described by Williams as “commodifying nature” for the benefit of Europe.¹²⁰ In engaging with the environment of non-European nations, colonial administrators, trading companies, and foreign investors had a targeted focus. This entailed the efficient exploitation of natural resources for European purposes, the subjugation of nature to enable commercial enterprise, and the management of supply lines of raw materials to Europe.¹²¹ Lowenthal encapsulates the general imperial approach to the environment and local communities in which European business operations were established: “Local livelihood and ecology, indigenous or settler, were of no moment in themselves; all that mattered was producing as much as possible as cheaply as possible for

116. Benjamin J. Richardson et al., *Environmental Law in Post-Colonial Societies: Aspirations, Achievements and Limitations*, in ENVIRONMENTAL LAW FOR SUSTAINABILITY: A READER 413, 415–16 (Benjamin J. Richardson & Stepan Wood eds., 2006); Thomas R. Dunlap, *Ecology and Environmentalism in the Anglo Settler Colonies*, in ECOLOGY AND EMPIRE: ENVIRONMENTAL HISTORY OF SETTLER SOCIETIES, *supra* note 114, at 76 .

117. Dunlap, *supra* note 116, at 76.

118. Annie Patricia Kameri-Mbote & Philippe Cullet, *Law, Colonialism and Environmental Management in Africa*, 6 REV. EUR. CMTY. & INT’L ENV’T L. 23 (1997); Gathii, *supra* note 50.

119. Kameri-Mbote & Cullet, *supra* note 118; Richardson et al, *supra* note 116, at 415–21.

120. Michael Williams, *The Role of Deforestation in Earth and World-System Integration*, in RETHINKING ENVIRONMENTAL HISTORY: WORLD-SYSTEM HISTORY AND GLOBAL ENVIRONMENTAL CHANGE 101, 109 (Alf Hornborg et al. eds., 2007).

121. Anghie, *supra* note 46, at 472–73; Richardson et al., *supra* note 116, at 415–16; Kameri-Mbote & Cullet, *supra* note 118, at 23, 25–27; Lowenthal, *supra* note 115, at 230, 232–33; Atluri Murali, *Whose Trees? Forest Practices and Local Communities in Andhra, 1600-1922*, in NATURE, CULTURE, IMPERIALISM: ESSAYS ON THE ENVIRONMENTAL HISTORY OF SOUTH ASIA 86, 96-104, 121–22 (David Arnold & Ramachandra Guha eds., 1995).

the home market.”¹²² Although the environmental impacts of this period of Western commercial and political expansionism were by no means homogenous, they were often immense.¹²³ European commercial enterprise in non-European territories tended to induce extensive deforestation, salinization, and loss of biodiversity. These patterns also occurred with social and cultural impacts, such as indigenous alienation from land and the destruction of traditional resource use patterns of the local communities.¹²⁴ Vast resources were used and ecologies dramatically altered in the construction of railways, the establishment of large-scale cash crop plantations, the founding of factories, the process of mining, and in the transfer to systems of individual land ownership.¹²⁵ As the ecological impacts of colonial operations began to hurt supply lines and resources came under pressure, authorities responded with a number of mechanisms. Some of the most invasive measures included imperial forestry management and conservationist policies of setting aside land as national parks.¹²⁶

Conservationist ideology is a complex phenomenon. Richard Grove argues that characterizations of colonial forestry regulation as a form of “resource exploitation and land seizures by the state . . . overlook the remarkably innovative nature of early colonial conservationism.”¹²⁷ There were undoubtedly revolutionary techniques employed in imperial forestry management as well as significant preservation projects initiated,¹²⁸ but Grove seems to downplay the price that was paid for the knowledge gained by the colonial authorities.¹²⁹ Observing the

122. Lowenthal, *supra* note 115, at 230.

123. Michael Williams, *Ecology, Imperialism and Deforestation*, in *ECOLOGY AND EMPIRE: ENVIRONMENTAL HISTORY OF SETTLER SOCIETIES*, *supra* note 114, at 176–77; Lowenthal, *supra* note 115, at 232; Richard Grove, *Conserving Eden: The (European) East India Companies and their Environmental Policies on St. Helena, Mauritius and in Western India, 1660 to 1854*, 35 *COMP. STUD. SOC'Y & HIST.* 318, 320 (1993).

124. Williams, *supra* note 123, at 170, 175–78, 181; Kameri-Mbote & Cullet, *supra* note 118; Lowenthal, *supra* note 115, at 232.

125. Williams, *supra* note 123, at 175–78; Kameri-Mbote & Cullet, *supra* note 118; *see also* Anghie, *supra* note 46, at 483–87 (for a discussion of the impacts of phosphate mining on Nauru from 1900 by the British Pacific Phosphate Company, and the British, Australian, and New Zealand authorities).

126. WILLIAM BEINART & LOTTE HUGHES, *ENVIRONMENT AND EMPIRE* 269–71 (2007); Williams, *supra* note 123, at 178; Kameri-Mbote & Cullet, *supra* note 118, at 23–24.

127. Grove, *supra* note 123, at 321.

128. *See also* GREGORY ALLEN BARTON, *EMPIRE FORESTRY AND THE ORIGINS OF ENVIRONMENTALISM* 164 (2002).

129. *See, e.g.*, Grove, *supra* note 123, at 325 (stating, “Thus on the earliest European island colonies the destructive effects of capital-intensive economic activity first became fully apparent and elicited an environmental critique.”).

environmental degradation that followed imperial activity did result in a more sophisticated European understanding of ecological processes.¹³⁰ Conservationism and imperial forestry instigated new colonial resource management techniques.¹³¹ The origins of environmentalism are linked with the forestry use systems devised under colonial control.¹³² However, these elements do not negate the fact that the primary objective of the system was to ensure continued resource exploitation for Europe.¹³³

Conservationism in the nineteenth century was an imposed Western perspective on land management.¹³⁴ Conservationism brought more sophisticated management practices to colonial resource use systems. However, the ideology did not engage with the indigenous perspective on sustainability and it perpetuated indigenous displacement from the communal land holdings that had been central to their resource management systems.¹³⁵ Colonial land use regimes were political control mechanisms as well as revenue-raising tools affected through the imposition of taxes and fines on local communities.¹³⁶ These regimes set in motion inappropriate regulatory patterns that have continued into the post-colonial setting.¹³⁷ They have irrevocably broken local communities.¹³⁸ The experiences and observations of the scientists who accompanied the traders and settlers into these new territories may have generated the emergence of ecological ideas in Europe and injected new perspectives into Western conceptualizations of nature.¹³⁹ It seems a high price, however, for the non-European world to have to pay for European environmental enlightenment—particularly so when it is recalled that the prevailing view of imperial commercial operators

130. Grove, *supra* note 123, at 318–20; RICHARD H. GROVE, GREEN IMPERIALISM: COLONIAL EXPANSION, TROPICAL ISLAND EDENS AND THE ORIGINS OF ENVIRONMENTALISM, 1600–1860; 3–9 (1995) [hereinafter GROVE, GREEN IMPERIALISM].

131. GROVE, GREEN IMPERIALISM, *supra* note 130, at 3–12; Grove, *supra* note 123.

132. GROVE, GREEN IMPERIALISM, *supra* note 130, at 12; Grove, *supra* note 123.

133. Williams, *supra* note 120, at 109; Williams, *supra* note 123, at 178; Lowenthal, *supra* note 115, at 230, 232; Richardson et al., *supra* note 116, at 415–16.

134. Kameri-Mbote & Cullet, *supra* note 118, at 24.

135. *Id.* at 26–29; BEINART & HUGHES, *supra* note 126, at 269–71; Murali, *supra* note 121; Williams, *supra* note 123, at 178.

136. BEINART & HUGHES, *supra* note 126, at 119–21, 269–71; Williams, *supra* note 123, at 178; Murali, *supra* note 121.

137. Richardson, et al., *supra* note 116, at 415–21; Kameri-Mbote & Cullet, *supra* note 118.

138. Kameri-Mbote & Cullet, *supra* note 118, at 23, 26.

139. GROVE, GREEN IMPERIALISM, *supra* note 130, at 3–9; Grove, *supra* note 123.

remained stolidly one of exploitation of the resources of non-European nations.¹⁴⁰

This commercial culture in the imperial era of viewing the resources of colonized nations or the host state as a commodity for the use of Western interests shaped the core relationship between the international investor and the environment of the host state. It was an instrumentalist view of the environment, conceptualizing it as an object to be controlled and used by the foreign entity. This approach is reproduced in the modern context with the continuation of the focus on foreign investors' commercial rights at the expense of the host state's interests in protecting its environment. It is also seen in the reluctance within the investment community to integrate environmental considerations into international investment rules. This is the mindset of nineteenth century imperialist conceptualizations of the environment—if the environment is perceived solely as a commodity for exploitation, it is not necessary to consider how commercial activities impact on it outside of its role as a commodity.

This approach needs to change. International investment law needs to reflect the complexities of the environment as a dynamic, multilayered entity with local and global dimensions and multiple stakeholders, not merely as a resource enabling investment activity. It needs to recognize that the environment also constitutes, to use Beinart and Hughes' words, a series of "contested social spaces."¹⁴¹ Foreign investors have maintained a dominant position in that contest since the nineteenth century, using international law to legitimize forms of environmental use in the host state that have often been at the expense of local and indigenous communities. Currently, it is a challenge for international law to facilitate a shift away from a commercial culture in which the needs of the investor are paramount to one where investment operates within an ecologically sustainable framework.

D. Breaking from the Past or Reproducing Economic Imperialism?

The imperialist context in which international investment law emerged was fundamental in shaping the substance of those rules. The origins of imposition, the alignment of state interests with those of their nationals engaged in trade and foreign investment, and the conceptualization of the resources of the host state as material for the use

140. Lowenthal, *supra* note 115, at 230, 232.

141. BEINART & HUGHES, *supra* note 126, at 119.

of foreign entities were all instrumental elements in the construction of international rules on foreign investment protection.

This foundational approach remains imbued within modern international investment law. Maintaining that imperialist character is, however, a political choice driven by the interests of capital-exporting states. As such, an alternate route can be taken. The twenty-first century provides treaty negotiators and arbitrators engaged on investment disputes with an opportunity to break with that past. This could be seen in the insertion of socially and environmentally responsible provisions into international investment agreements. It could also be seen in the shifting of the “objectives” of these treaties to include promotion of sustainable development. It could include enabling host states to invoke bilateral investment treaties for damage caused by investors’ activities. And it could also manifest in more progressive treaty interpretation so as to give effect to the social, environmental, and developmental needs of host states. Currently, however, this type of approach is not being adopted. The next section explores in detail the ways in which economic imperialism is continuing to manifest in modern international investment law.

III. ECONOMIC IMPERIALISM WITHIN TWENTY-FIRST CENTURY INTERNATIONAL INVESTMENT LAW

International investment law in the twenty-first century currently reproduces economic imperialism through its lack of responsiveness to the impact of investor activity on the local communities and environment of the host state and through the categorization of public welfare regulation as an investment treaty violation.

A. *Non-Engagement with Impacts of Investor Activity*

Pressure to reshape international investment law has been fueled by high-profile examples of corporate environmental misconduct in host states. The imbalance in international investment law is starkly visible in these cases—investor protection is its focus, not the health, safety, and well-being of the citizens and environment of the host state. Foreign investment protection law cannot be called upon to protect the host state from the detrimental effects of investors’ operations. This traditional indifference of international investment law to the impact of investor activity on the local communities and environment of the host state leaves a gap in the reach of international regulation. The injustice that flows from this disparity has led to calls for the development of an

international regulatory framework to ensure corporate social and environmental accountability.¹⁴²

This section examines key disputes to demonstrate the effects of an international investment legal regime that is solely concerned with investor rights and does not contain investor responsibilities. This discussion illustrates the way in which the origins of international investment law are alive in the modern relationship between foreign investors and the environment of host states. In particular, they are visible in:

- The commodification of the environment of the host state for the use of the foreign investor;
- The powerful political position of multinational corporations and the close alignment of their interests with those of their home states; and
- The continued exclusion of the host state from protection under the principles of international investment law.

There are numerous recent examples of environmental malpractice and breaches of human rights by foreign-owned entities, particularly in developing countries. The disputes have involved allegations of environmental devastation, contamination of lands and rivers, ravaged rainforest, damage to human health, including death and birth defects, the fracturing of communities, human rights abuses, and collaboration with repressive state regimes. Notable conflicts include controversies surrounding the operations of the Shell Oil Company in Nigeria,¹⁴³ Freeport and Rio Tinto in Indonesia,¹⁴⁴ ChevronTexaco Corporation in Ecuador,¹⁴⁵ Broken Hill Proprietary Company ("BHP") in Ok Tedi, Papua New Guinea,¹⁴⁶ and Union Carbide in Bhopal, India.¹⁴⁷

142. See, e.g., ZERK, *supra* note 58; Friends of the Earth International, Briefing—Towards Binding Corporate Accountability, <http://www.foei.org/en/publications/corporates/accountability.html> (last visited Sept. 9, 2008); Halina Ward, *Securing Transnational Corporate Accountability Through National Courts: Implications and Policy Options*, 24 HASTINGS INT'L & COMP. L. REV. 451, 472–74 (2001); Jennifer Clapp, *Global Environmental Governance for Corporate Responsibility and Accountability*, 5 GLOBAL ENVTL. POL. 23, 23 (2005).

143. See, e.g., Edna Eguh Udobong, *Multinational Corporations Facing the Long Arm of American Jurisdiction for Human Rights and Environmental Abuses: The Case of Wiwa v. Royal Dutch Petroleum, Co.*, 14 SE. ENVTL. L.J. 89 (2005).

144. *Id.*; see also NGO commentary of WALHI-Indonesian Forum for Environment, Conflict and Militarism (2004), http://www.eng.walhi.or.id/kampanye/psda/konflikmil/conflict_info/ (last visited Oct. 28, 2008).

145. See, e.g., Simon Chesterman, *Oil and Water: Regulating the Behaviour of Multinational Corporations Through Law*, 36 N.Y.U. J. INT'L L. & POL. 307 (2004); for a discussion on environmentally damaging oil industry and mining practices, see Richard L. Herz, *Litigating Environmental Abuses Under the Alien Tort Claims Act: A Practical*

1. *Ok Tedi Mine*

The mining operation at Ok Tedi, of which BHP was the majority shareholder, released 70 million tons of mine tailings and waste rock residue into the Ok Tedi and Fly Rivers every year since 1984.¹⁴⁸ This toxic sediment raised the river beds, causing the flooding of a 1,300 kilometer area and smothering of rainforest in a process the United Nations Environment Programme (“UNEP”) labeled “dieback.”¹⁴⁹ The heavily polluted waters poisoned vegetation, fish, and animals, leaving the ecology of substantial parts of the rivers almost lifeless.¹⁵⁰ The contaminated rivers and soils affected the subsistence lifestyles of local indigenous peoples reliant on the environment for survival.¹⁵¹ Hunting lands, gardens, and crops were lost, fish in the rivers were destroyed, drinking water was contaminated, and the numbers of birds and wildlife

Assessment, 40 VA. J. INT’L L. 545, 547–49 (2000); Jane Perlez & Kirk Johnson, *Behind Gold’s Glitter: Torn Lands and Pointed Questions*, N.Y. TIMES, Oct. 24, 2005; see also NGO commentary of Amazon Defense Coalition, *ChevronToxico: The International Campaign to hold ChevronTexaco Accountable for its Toxic Contamination of the Ecuadorian Amazon* (Mar. 2005), <http://cheverontoxico.com/article.php?id=110> (last visited Oct. 28, 2008).

146. See Chesterman, *supra* note 145; Jessie Connell, *Trans-National Environmental Disputes: Are Civil Remedies More Effective for Victims of Environmental Harm?*, 10 ASIA PAC. J. ENVTL L. 39, 61–64 (2007). See also NGO commentary on the environmental degradation from the mine tailings in Polly Ghazi, World Resource Institute, *Unearthing Controversy at the Ok Tedi Mine* (July 2003), http://newsroom.wri.org/wrifeatures_text.cfm?ContentID=1895 (last visited Oct. 28, 2008).

147. See Chesterman, *supra* note 145; see also Jamie Cassels, *Outlaws: Multinational Corporations and Catastrophic Law*, 31 CUMB. L. REV. 311 (2000); Sukanya Pillay, *Absence of Justice: Lessons from the Bhopal Union Carbide Disaster for Latin America*, 14 MICH. ST. J. INT’L L. 479 (2006); Sudhir K. Chopra, *Multinational Corporations in the Aftermath of Bhopal: The Need for a New Comprehensive Global Regime for Transnational Corporate Activity*, 29 VAL. U. L. REV. 235 (1994); International Campaign for Justice in Bhopal, <http://www.bhopal.net/index1.html> (last visited Nov. 25, 2008).

148. Ghazi, *supra* note 146; UNEP, *Waste from Consumption and Production-The Ok Tedi Case: A Pot of Gold* (2009), <http://www.grida.no/publications/vg/waste/page/2859.aspx>. [hereinafter UNEP]. BHP transferred its 52% holding in the company, Ok Tedi Mining Ltd., to the Papua New Guinea Sustainable Development Program Company in 2002. The other original shareholders were Amoco Minerals, a consortium of German companies, and a 20% stake held by the Papua New Guinean government.

149. UNEP, *supra* note 148.

150. UNEP, *supra* note 148; Ghazi, *supra* note 146; Heather G. White, *Including Local Communities in the Negotiation of Mining Agreements: The Ok Tedi Example*, 8 TRANSNAT’L LAW. 303, 312 (1995).

151. UNEP, *supra* note 148; Ghazi, *supra* note 146; White, *supra* note 150, at 311–18; Gavin Hilson, *An Overview of Land Use Conflicts in Mining Communities*, 19 LAND USE POL’Y 65, 69 (2002).

were reduced.¹⁵² In seeking redress for the damage caused by the Ok Tedi mine, the local indigenous peoples turned to the domestic courts of Australia, the investor's home state.¹⁵³ And in 1994, proceedings were issued in the Victorian Supreme Court against BHP and Ok Tedi Mining, Limited.¹⁵⁴

Practical reasons for filing an action in the home state of the parent company include the lack of assets and funds held by the subsidiary company, the potential for higher damages awards in the home state, and structural obstacles to plaintiff claims in their own countries, such as the lack of legal aid facilities or host state unwillingness to regulate multinational corporations.¹⁵⁵ Ethical reasons include the desire to close the gap between law and ethics and to ensure that corporate responsibility and accountability apply equally in transnational operations and home state activities.¹⁵⁶

It is, however, difficult to obtain compensation from a parent company for environmental degradation caused by their operations in other countries. Jurisdictional issues, in particular the doctrine of *forum non conveniens*, and rules on corporate structure, separate legal personality, and limited liability, are regularly invoked to preclude the hearing of actions by foreign plaintiffs against multinational corporations in their home state.¹⁵⁷ The doctrine of *forum non conveniens* enables a court to decline jurisdiction to hear a matter on the basis that it is an inappropriate or inconvenient forum.¹⁵⁸ The original scope of the doctrine was to shield defendants from an abuse of process, which was characterized as deliberate selection of an inconvenient forum by a plaintiff so as to harass the defendant.¹⁵⁹ Australia has retained a form of

152. White, *supra* note 150, at 312–21; Hilson, *supra* note 151, at 69–70.

153. Connell, *supra* note 146, at 61–64.

154. Dagi v. Broken Hill Proprietary Co. (No. 2), (1997) 1 V.R. 428, 428 (S. Ct. Victoria).

155. Cassels, *supra* note 147; Ward, *supra* note 142 at 462–63; Chesterman, *supra* note 145, at 315; INTERNATIONAL BAN ASBESTOS SECRETARIAT, UK VICTORY FOR AFRICAN ASBESTOS VICTIMS (2000), http://www.btinternet.com/~ibas/lords_cape.htm.

156. Malcolm J. Rogge, *Towards Transnational Corporate Accountability in the Global Economy: Challenging the Doctrine of Forum Non Conveniens in In Re: Union Carbide, Alfaro, Sequihua, and Aguinda*, 36 TEX. INT'L L.J. 299, 316–17 (2001).

157. Chesterman, *supra* note 145, at 315–16; Ward, *supra* note 142, at 460; Peter Prince, *Bhopal, Bougainville and Ok Tedi: Why Australia's Forum Non Conveniens Approach is Better*, 47 INT'L & COMP. L.Q. 573, 573 (1998); Michael Anderson, *Transnational Corporations and Environmental Damage: Is Tort Law the Answer?*, 41 WASHBURN L.J. 399, 412–13 (2002).

158. Anderson, *supra* note 157, at 412; Chesterman, *supra* note 145, at 315; Prince, *supra* note 157, at 573; Ward, *supra* note 142, at 460.

159. Prince, *supra* note 157, at 573; Ralph Kaye, *Transnational Environmental Litigation*, 24 ENVTL PLAN. L.J. 35, 39 (2007).

the doctrine that is close to its original purpose, in which a stay of proceedings will only be granted if the forum is “clearly inappropriate” in the sense that it is oppressive or vexatious.¹⁶⁰ The United States and Britain have adopted versions of the “most suitable forum” model, according to which the defendant must show that an adequate alternative forum exists and that the private and public interests involved point to removing the case to that alternative forum.¹⁶¹ This approach has been described as one that discriminates against foreign plaintiffs and as a standard mechanism regularly invoked by multinational corporations to avoid responsibility for damage caused by their activities in host states.¹⁶²

Forum non conveniens was not directly invoked in *Dagi and Others v. The Broken Hill Proprietary Company Ltd and Another (No. 2)* (the “Ok Tedi Dispute”).¹⁶³ Given the Australian approach, there was little point in seeking to rely on this doctrine to dismiss the proceedings.¹⁶⁴ BHP did, however, put forward other jurisdiction-based challenges,¹⁶⁵ leading Ralph Kaye to argue that the company was attempting to benefit from *forum non conveniens*-type arguments via alternate routes.¹⁶⁶ BHP also sought to prevent the proceedings through collusion with the government of Papua New Guinea. The government agreed to enact legislation criminalizing the bringing of compensation claims against BHP.¹⁶⁷ The plaintiffs in the Ok Tedi Dispute filed an application in the

160. *Voth v. Manildra Flour Mills Pty Ltd* (1990) 171 C.L.R. 538, 551 (Austl.); *see also Kaye, supra* note 159, at 43; Prince, *supra* note 157, at 576; Chesterman, *supra* note 145, at 317.

161. Prince, *supra* note 157, at 574–75; Anderson, *supra* note 157, at 412; Kaye, *supra* note 159, at 39. There are indications that the British courts are moving away from the American model of *forum non conveniens*. *See, e.g., Lubbe v. Cape Plc* [2000] 1 W.L.R. 1545 (H.L.). This case is discussed below.

162. Prince, *supra* note 157, at 574; Kaye, *supra* note 159, at 39; Brooke Clagett, *Forum Non Conveniens in International Environmental Tort Suits: Closing the Doors of U.S. Courts to Foreign Plaintiffs*, 9 TUL. ENVTL L.J. 513, 516 (1996).

163. (1997) 1 V.R. 428 (Austl.). *See, Kaye, supra* note 159, at 43; Prince, *supra* note 157, at 594.

164. Kaye, *supra* note 159, at 43–44; Prince, *supra* note 157, at 594.

165. Such as the double actionability rule and the local action rule. *See Kaye, supra* note 159 for a discussion of these principles.

166. Kaye, *supra* note 159, at 44.

167. Chesterman, *supra* note 145, at 322–23. Chesterman also refers to the example of ExxonMobil’s actions when faced with allegations of misconduct in its Indonesian operations. The oil company solicited a United States State Department opinion that the lawsuit itself harmed American interests; discontinuance of the proceedings shortly followed. Connell, *supra* note 146, at 62 (attempting to influence the governments of home and host states is a common strategy employed by multinational corporations in disputes over their conduct).

Supreme Court of Victoria requesting that BHP be found in contempt of court, arguing that BHP's actions were "designed to intimidate them and dissuade them from continuing to press their claims before the court."¹⁶⁸ The court agreed and found BHP guilty of contempt.¹⁶⁹ However, the ruling was overturned on appeal on an issue of standing.¹⁷⁰ Ultimately, the case settled.¹⁷¹

The flooding of forests downstream from the Ok Tedi mine with toxic mine tailings exemplifies the traditional exploitative approach of foreign investors to the environment of host states. Conceptually, the environment at Ok Tedi was valuable to the foreign investor for what was contained within it and for what was valued by global economic markets—gold and copper. The remaining elements of the environment were not valuable to the investor, and, as such, the prospect of substantial damage occurring to those aspects of the environment did not preclude the operation of the mine. At its core, these circumstances embodied a process of commodification of the environment of the host state for the use of foreign entities and legitimized the investor's indifference to the incidental environmental damage resulting from the operations. It is a conceptualization of the environment that harks back to the era of imperialism, and it is hugely problematic that a seventeenth to nineteenth century imperialist conceptual framework still informs the modern relationship between foreign investors and the environments within which they operate.

International investment law, as it currently stands, does very little to change that view of the environment. In fact, it reinforces it. International investment law is premised on protecting the rights of foreign investors to carry out their activities within host states. Sourced from a purely instrumentalist conceptualization of the environment, it is indifferent to the effects of investor activity on the local communities and environments of host states. It does not incorporate socially and environmentally responsible requirements within its principles. Indeed, it has been argued that even legitimate environmental measures must

168. *The Broken Hill Proprietary Company Ltd v. Dagi* (1996) 2 V.R. 117, 120 (Austl.).

169. *Id.* at 120.

170. *Id.* On appeal, the matter turned on whether contempt proceedings could only be brought by the Attorney-General for the State of Victoria. The Court of Appeal determined that that was the case due to the operation of section 46 of the Public Prosecutions Act. The Attorney-General, however, declined to pursue the matter on behalf of the plaintiffs. The Attorney-General had, in fact, been given leave to intervene in the contempt proceedings and, along with BHP, appealed the original finding of contempt.

171. Prince, *supra* note 157, at 595, n.120 (the settlement involved A\$500,000 in compensation, including the building of a tailings containment).

ensure their compliance with international investment rules, rather than the other way around.¹⁷²

As solely an investor protection regime, international investment law in its current form is unable to alleviate the plight of local communities facing environmental degradation and damage to human health resulting from investors' activities. Without a comprehensive international regulatory framework through which to govern the conduct of multinational corporations, there is no international avenue to pursue corporate accountability for their activities in host states. Seeking redress through the national courts of the home state is an option, but a problematic one. Halina Ward points out that establishing parent company responsibility in the national courts of the home state is effectively a "lottery."¹⁷³

2. Bhopal, India

The extent of the injustice that can result from the non-engagement of international investment law with the impact of investor activities on the local communities and environments of the host state is also illustrated in the infamous Union Carbide disaster at Bhopal, India. In 1984, a lethal gas leak from a pesticide factory sent clouds of poisonous fumes across Bhopal, a city of one million people, killing approximately 8,000 individuals in the week following the disaster.¹⁷⁴ An estimated additional 20,000 people have since died from illness and injury resulting from the exposure to methyl isocyanate gas.¹⁷⁵ Up to 150,000 residents of Bhopal suffered severe injuries.¹⁷⁶ Union Carbide Corporation, an American multinational corporation, operated in India through its subsidiary, Union Carbide of India, Limited ("Union Carbide of India"). This Indian company owned the pesticide factory responsible for the disaster.¹⁷⁷

By early 1985, multiple proceedings had been filed in the United States against Union Carbide, seeking damages in the realm of US\$5

172. Todd Weiler & Thomas W Wälde, *Investment Arbitration under the Energy Charter Treaty in the Light of New NAFTA Precedents: Towards a Global Code of Conduct for Economic Regulation*, 2 OIL, GAS & ENERGY L. INTELLIGENCE (2003).

173. Ward, *supra* note 142, at 462.

174. The Bhopal Medical Appeal and Sambhavna Trust, *What Happened in Bhopal?*, <http://www.bhopal.org/whathappened.html> (last visited Feb. 23, 2008).

175. *Id.*; Edward Broughton, *The Bhopal Disaster and its Aftermath: A Review*, 4 ENVTL HEALTH: A GLOBAL ACCESS SCI. SOURCE 1, 2 (2005); Susan Engel & Brian Martin, *Union Carbide and James Hardie: Lessons in Politics and Power*, 20 GLOBAL SOC'Y 475, 478 (2006).

176. Engel & Martin, *supra* note 175, at 478.

177. Cassels, *supra* note 147, at 314.

billion to US\$50 billion.¹⁷⁸ At this point, the Indian government stepped in, consolidated these proceedings pursuant to the Bhopal Gas Leak Disaster (Processing of Claims) Act 1985, and declared itself the sole representative of the victims.¹⁷⁹

Union Carbide defended the proceedings, putting forward arguments based on *forum non conveniens* and separate corporate personality. The company argued that the United States was an inappropriate forum in which to hear the matter.¹⁸⁰ In seeking to support this argument, Union Carbide asserted that it was not responsible for the activities of the Indian company, did not have any operations in India at all, and was entirely unconnected with the events at the Bhopal pesticide factory.¹⁸¹ It argued that there was no such thing as a “multinational corporation” and, that the American company, Union Carbide Corporation, was an entirely separate legal entity from the company the plaintiffs should have been pursuing, Union Carbide of India.¹⁸²

India countered with an argument described as “multinational enterprise liability.”¹⁸³ It was a line of reasoning based on the idea that a collective group of companies operating as a single economic body under the control of one multinational corporation should be regarded as one single legal entity.¹⁸⁴ It follows that as there is a direct level of control between the parent company and its subsidiaries, the parent company should be liable for the activities of its subsidiaries.¹⁸⁵ This theory attempts to advance the law on corporate legal personality, ensuring that it reflects the reality of transnational business in a globalized world.¹⁸⁶

178. C. M. Abraham & Sushila Abraham, *The Bhopal Case and the Development of Environmental Law in India*, 40 INT'L & COMP. L.Q. 334, 337 (1991).

179. *Id.* 337–38; Cassels, *supra* note 147, at 321; Engel & Martin, *supra* note 175, at 480.

180. Prince, *supra* note 157, at 586; Cassels, *supra* note 147, at 325; R. Clayton Trotter et al., *Bhopal, India and Union Carbide: The Second Tragedy*, 8 J. BUS. ETHICS 439, 447 (1989).

181. Cassels, *supra* note 147, at 322; Engel & Martin, *supra* note 175, at 483–84.

182. Engel & Martin, *supra* note 175, at 483–84; Cassels, *supra* note 147, at 322, 329. These arguments are based on fundamental principles of company law precluding a court from “piercing the corporate veil” so as to look behind the façade of separate legal personality for companies within the same “family.” See also Phillip I. Blumberg, *Asserting Human Rights against Multinational Corporations under United States Law: Conceptual and Procedural Problems*, 50 AM. J. COMP. L. 493, 514–15 (2002).

183. Cassels, *supra* note 147, at 323.

184. P. T. Muchlinski, *The Bhopal Case: Controlling Ultrahazardous Industrial Activities Undertaken by Foreign Investors*, 50 MOD. L. REV. 545, 557 (1987); Cassels, *supra* note 147, at 322–23.

185. Muchlinski, *supra* note 184, at 557.

186. See Cassels, *supra* note 147, at 323–325; see also the discussion on Bhopal and establishing a treaty on jurisdiction over transnational claims in an attempt to regulate the

As Cassels argues, it is indeed ironic to see “[a] major multinational corporation, whose policy is to maintain centralized integrated corporate strategic planning, direction and control, [argue] that it had no responsibility for its subsidiary.”¹⁸⁷ The American company was the majority shareholder in Union Carbide of India, it appointed the board of directors, controlled the management of the company, designed the facility, transferred all the technology, provided all the information and training, and made the key policy and directional decisions for the operation of the factory.¹⁸⁸ Justice Keenan, however, was persuaded by Union Carbide’s arguments that it adopted a “hands-off” approach to the management of its Indian operations.¹⁸⁹ Ultimately, the proceedings were dismissed on grounds of *forum non conveniens* and judicial comity of nations.¹⁹⁰

Proceedings were filed in the District Court of Bhopal in 1986.¹⁹¹ Ultimately, a settlement was reached.¹⁹² Union Carbide and India agreed on a figure of US\$470 million and orders requiring Union Carbide to pay this sum were made in the Supreme Court of India in 1989.¹⁹³ It was a woefully inadequate sum, from which the families of the deceased received on average US\$2,200 and the injured much less. The sums were insufficient to provide for the ongoing medical needs of the victims.¹⁹⁴ It has been suggested that India’s desire to attract new foreign investment was a factor in its acceptance of such a small compensation sum and that the government did not wish to discourage potential investors with a large settlement or continued litigation.¹⁹⁵

conduct of multinational corporations in David H. Ott, *Bhopal and the Law: The Shape of a New International Legal Regime*, 7 THIRD WORLD Q. 648 (1987).

187. Cassels, *supra* note 147, at 331; see also the discussion in Prince, *supra* note 157, at 586–87.

188. Prince, *supra* note 157, at 586–87; Cassels, *supra* note 147, at 329.

189. UPENDRA BAXI, INCONVENIENT FORUM AND CONVENIENT CATASTROPHE: THE BHOPAL CASE 5, 52–53 (1986); Cassels, *supra* note 147, at 326–27, 329.

190. In Re Union Carbide Corporation Gas Plant Disaster, 634 F. Supp. 842, 867 (S.D.N.Y. 1986) *aff’d* by 809 F.2d 195 (2d Cir.1987).

191. Union of India v. Union Carbide Corp., Bhopal Gas Claim Case No. 113 of 1986.

192. Cassels, *supra* note 147, at 330; Abraham & Abraham, *supra* note 178, at 336.

193. Chandana Mathur & Ward Morehouse, *Twice Poisoned Bhopal: Notes on the Continuing Aftermath of the World’s Worst Industrial Disaster*, 62 INT’L LAB. & WORKING-CLASS HIST. 69, 73 (2002); Cassels, *supra* note 147, at 330; Abraham & Abraham, *supra* note 178, at 336.

194. Broughton, *supra* note 175, at 1, 3; Cassels, *supra* note 147, at 330; Ian Christopher Fletcher et al., *Justice for Bhopal*, 91 RADICAL HIST. REV. 7, 8 (2005); Mathur & Morehouse, *supra* note 193, at 73; Maurizio Murru, *Bhopal 20 Years On: Globalization and Corporate Responsibility*, 2 HEALTH POL’Y & DEV. 249, 250 (2004).

195. Engel & Martin, *supra* note 175, at 485; Mathur & Morehouse, *supra* note 193,

The failure to obtain adequate compensation for the victims of the Bhopal gas leak is a lengthy and disappointing story, reflecting the traditional relationship between foreign investors, their home states, and the local communities and environments of host nations. It illustrates the foreign investor's conceptualization of the environment of the host state as one for its use and exploitation even to the extent of risking substantial damage to the land and its inhabitants—in this case, in the form of a sub-standard, hazardous chemical manufacturing facility located within a city of one million people.

The tactics used by Union Carbide—re-framing their multinational operations as all entirely unconnected entities, painting the United States as an inappropriate forum for the litigation, insisting that sabotage caused the gas leak, the insufficient financial and medical assistance for the victims, and the lack of public scientific information regarding the exact composition of the gas—all point to Jasanoff's statement that "Bhopal's tragedy was as much about the capacity of powerful institutions selectively to highlight and screen out knowledge as it was about maimed lives and justice denied or delayed."¹⁹⁶ The legal doctrines of *forum non conveniens* and judicial comity of nations were used to avoid responsibility in the United States for the damage caused in Bhopal and the unresponsiveness of international investment law to the impact of Union Carbide's activity on the people and environment of Bhopal illustrates again the "gap" in the international regulatory framework.

3. *Foreign Investors and the Use of Legal Doctrine: Reproducing Imperialism*

Although there appears to be a growing awareness within the judiciary of the need to address the injustice that can occur from the misuse of jurisdictional doctrine,¹⁹⁷ *forum non conveniens* itself is problematic in a more fundamental way. The evolution of the United States' application of *forum non conveniens* is essentially a manifestation of a practice seen since the era of the Dutch East India Company—the use of legal doctrine to entrench the position of foreign investors and capital-exporting states.¹⁹⁸ Anghie points to the manipulation of

at 69.

196. Sheila Jasanoff, *Bhopal's Trials of Knowledge and Ignorance*, 98 *Isis* 344, 344 (2007); see also Engel & Martin, *supra* note 175, at 481–82; see the discussion in BAXI, *supra* note 189, at 1–34.

197. Chesterman, *supra* note 145, at 317–18. See, e.g., *Lubbe*, 1 W.L.R. 1545. The House of Lords determined that 3,000 South African asbestos victims could bring compensation claims against a British company in the United Kingdom in relation to the activities of its South African subsidiaries.

198. ANGHIE, *supra* note 1, at 224; Porras, *supra* note 73, at 742–43, 744–47; Van

international legal doctrine in the seventeenth to the nineteenth centuries to support the political and economic aspirations of European expansionism.¹⁹⁹ European control over the development of international law during this period meant that its rules evolved to benefit Western states and to exclude non-European territories from its protection.²⁰⁰ Anghie also argues that when developing states sought to utilize international law in the post-colonial era, doctrine was once again developed to the detriment of developing states, ensuring the protection of the interests of their former colonizers.²⁰¹

It would seem that the use of international comity, *forum non conveniens*, and the doctrine of separate corporate legal personality to preclude foreign investor liability for environmental damage in host states also replicates this pattern. Rogge describes the character of the current legal framework as constituting the “best of both worlds” for multinational corporations—they are permitted to operate in other states and to profit from politically oppressive regimes or environmentally lax regulation, but are shielded from liability for damage resulting from those activities.²⁰² The same system that enables foreign investors to engage in transnational operations withholds protection from those they damage.²⁰³

It is even more troubling when the approach to legal standing in investor-state arbitration is considered. When companies have sought to bring investor claims against a host state, problematic aspects of their corporate structure have not been seen as a bar to bringing a claim.²⁰⁴ For example, in *S.D. Myers Inc v. Gov't of Canada*,²⁰⁵ the American claimant company had no shareholding in the Canadian company that suffered the alleged harm. Both companies were part of a corporate group and family members owned all the shares in both the companies,

Ittersum, *supra* note 74.

199. ANGHIE, *supra* note 1, at 3–12, 65–114; Anghie, *supra* note 46, at 448.

200. *Id.*

201. See ANGHIE, *supra* note 1, at 235–44 (discussing the attainment of statehood and yet still being bound by decisions made under a colonial regime through the doctrine of acquired rights and *pacta sunt servanda*).

202. Rogge, *supra* note 156, at 300–01; see also Beth Stephens, *The Amoralism of Profit: Transnational Corporations and Human Rights*, 20 BERKELEY J. INT'L L. 45, 48 (2002).

203. Rogge, *supra* note 156, at 300; Judith Kimerling, *Indigenous Peoples and the Oil Frontier in Amazonia: The Case of Ecuador, ChevronTexaco, and Aguinda v. Texaco*, 38 N.Y.U. J. INT'L L. & POL. 413, 661 (2006).

204. CAMPBELL McLACHLAN ET AL., INTERNATIONAL INVESTMENT ARBITRATION: SUBSTANTIVE PRINCIPLES 184–92 (2007).

205. *S.D. Myers, Inc. v. Canada*, 40 I.L.M. 1408 (NAFTA Ch. Eleven Arb. Trib. 2001) (Partial Award, Decision on the Merits Nov. 2000).

but the two companies were not themselves interlinked and were entirely separate corporate entities.²⁰⁶ Reflecting the general approach in investment treaty arbitration, the *S.D. Myers* arbitral tribunal had no hesitation in piercing the corporate veil, stating, “. . . the Tribunal does not accept that an otherwise meritorious claim should fail solely by reason of the corporate structure adopted by a claimant in order to organise the way in which it conducts its business affairs.”²⁰⁷ It is telling the ease with which the legal doctrine of separate corporate legal personality can be swept aside when the beneficiary of such a decision is the foreign investor—and how religiously it is clung to when accountability of the multinational corporation is sought.

Anghie argues that colonialism reproduces itself.²⁰⁸ It is a subtle and pervasive phenomenon that finds infinite manifestations in modern international law and politics.²⁰⁹ Examples include the unresponsiveness of international investment law and the emergence of the “most suitable forum” model of *forum non conveniens*, accompanied by the doctrine of separate corporate personality and judicial comity of nations. These legal mechanisms have effectively assisted capital-exporting states, in particular the United States, in washing their hands of the damage their corporations cause in their overseas operations. Furthermore, the reasoning that has at times been used in denying host state plaintiffs access to United States’ courts suggests at least a subconscious affinity for the interests of the capital-exporting state and its multinational corporations. Along with the more understandable arguments on the location of witnesses and documents, there have also been unusual justifications for dismissing actions by host state plaintiffs, such as the unfairness of burdening the American taxpayer with the cost of hearing the matter, the need to avoid increasing the level of “docket congestion” in United States’ courts, and, ironically, the desire not to engage in neo-colonialism.²¹⁰ This last ground is illustrated in the following extract from Judge Keenan’s opinion dismissing the action filed in the United States on behalf of the victims of the Union Carbide disaster at Bhopal:

206. McLACHLAN ET AL. *supra* note 204, at 186.

207. *Id.*

208. Anghie, *supra* note 46, at 505-06; *Finding the Peripheries*, *supra* note 50.

209. Anghie, *supra* note 46; *Finding the Peripheries*, *supra* note 50.

210. These factors were presented as bases for the decision dismissing the suit filed against Union Carbide on behalf of the victims in Bhopal in *In re Union Carbide Corp. Gas Plant Disaster, at Bhopal, India* in Dec., 1984, 634 F. Supp. 842, 860, 862, 867 (S.D.N.Y. 1986). The need to not burden American citizens with jury service “in litigation which has no relation to their community” was also cited as a reason for dismissing a claim filed against Texaco for their operations in Ecuador in *Sequihua v. Texaco, Inc.*, 847 F. Supp. 61, 64 (S.D. Tex. 1994). For a critique of these bases, see Prince, *supra* note 157; Rogge, *supra* note 156, at 307.

In the Court's view, to retain the litigation in this forum, as plaintiffs request, would be yet another example of imperialism, another situation in which an established sovereign inflicted its rules, its standards and values on a developing nation. This Court declines to play such a role. The Union of India is a world power in 1986, and its courts have the proven capacity to mete out fair and equal justice. To deprive the Indian judiciary of this opportunity to stand tall before the world and to pass judgment on behalf of its own people would be to revive a history of subservience and subjugation from which India has emerged. India and its people can and must vindicate their claims before the independent and legitimate judiciary created there since the Independence of 1947.²¹¹

The irony of this is, of course, that Judge Keenan's stated desire to allow India's courts the opportunity to "stand tall" had a fundamentally imperialist result—United States-based multinational corporations do not have to operate according to U.S. standards, they are able to attach less value to the peoples and environment of host states than that of the United States, and they are not accountable within the United States for the damage they cause in their transnational operations.

The law of capital-exporting states enables their multinational corporations to pursue economic activities globally, but disengages when called upon to protect the local communities and environments within which those companies operate. The modern foreign investor is again protected by the development and manipulation of legal doctrine, reproducing the links between law and the interests of capital-exporting states and their nationals that were established through the seventeenth to early twentieth centuries. There is a pressing need to break with this pattern and establish a socially and environmentally responsible multilateral regulatory framework to govern the conduct of multinational corporations within host states.²¹² And the importance of the political role of powerful capital-exporting states, such as the United States, in bringing about such a break cannot be underestimated.

B. Twenty-First Century Alignment of State Interests with Investor Interests

The origins of foreign investment protection entwined government with private commercial interests. More recent alignment of state and investor interests has manifested in a variety of ways. The escalation in state activity in securing bilateral investment treaties has been attributed

211. *In re Union Carbide Corp. Gas Plant Disaster, at Bhopal, India in Dec., 1984*, 634 F. Supp. at 867.

212. See ZERK, *supra* note 58, for a discussion of these issues.

to the push of foreign investors for more secure and predictable legal regimes to protect investment.²¹³ Capital-exporting states actively promote the spread of investment liberalization policies, assisting with the growth in global capital flows.²¹⁴ Corporate representation in the negotiation of international agreements is increasing and states are facilitating this shift through the restructuring of their diplomatic systems and the establishment of formal consultation mechanisms.²¹⁵

There has been an intensification of private sector involvement in “commercial diplomacy.”²¹⁶ Business representatives are now regularly placed within overseas missions and given formal diplomatic status.²¹⁷ States have thrown their weight behind individual investment negotiations in support of their nationals.²¹⁸ Ministries of foreign affairs and ministries of trade are increasingly conjoined.²¹⁹ It is now common for formal associations or partnerships to exist between government and business in the provision of diplomatic services.²²⁰ In some states, such as Austria, the role of commercial diplomats has been delegated entirely

213. Jeswald W. Salacuse, *BIT by BIT: The Growth of Bilateral Investment Treaties and their Impact on Foreign Investment in Developing Countries*, 24 INT'L LAW. 655, 659 (1990); also in R. DOAK ET AL., FOREIGN INVESTMENT DISPUTES: CASES, MATERIALS AND COMMENTARY 19 (2005).

214. SANDS, *supra* note 82, at 119; A. Claire Cutler, *Critical Reflections on the Westphalian Assumptions of International Law and Organization: A Crisis of Legitimacy*, 27 REV. INT'L STUD. 133, 144 (2001); Jan A. Scholte, *Global Capitalism and the State*, 73 INT'L AFF. 427, 442 (1997).

215. Cutler, *supra* note 214, at 143–44; Donna Lee, *The Growing Influence of Business in U.K. Diplomacy*, 5 INT'L STUD. PERSP. 50, 52 (2004); Richard Sherman & Johan Eliasson, *Trade Disputes and Non-State Actors: New Institutional Arrangements and the Privatisation of Commercial Diplomacy*, 29 WORLD ECON. 473, 473–74, 478 (2006).

216. Philippe Sands, *Turtles and Torturers: The Transformation of International Law*, 33 N.Y.U. J. INT'L L. & POL. 527, 541–43 (2001); Lee, *supra* note 215, at 51. Lee defines “commercial diplomacy” as follows: “[C]ommercial diplomacy is best defined as the work of a network of public and private actors who manage commercial relations using diplomatic channels and processes . . . Commercial diplomacy involves the promotion of inward and outward investment and the promotion of exports in trade.”

217. Lee, *supra* note 215; see ALEXANDRE MERCIER, THE NETHERLANDS INSTITUTE OF INTERNATIONAL RELATIONS ‘CLINGENDAEL’ DISCUSSION PAPERS IN DIPLOMACY, COMMERCIAL DIPLOMACY IN ADVANCED INDUSTRIAL STATES: CANADA, THE UK, AND THE US (2007).

218. Lee, *supra* note 215, at 51; Rik Coolsaet, *Trade and Diplomacy: The Belgian Case*, 5 INT'L STUD. PERSP. 61, 64 (2004); John Peterson & Maria Green Cowles, *Clinton, Europe and Economic Diplomacy: What Makes the EU Different?*, 11 GOVERNANCE: AN INT'L J. POL'Y, ADMIN. & INST. 251, 252 (1998); see MERCIER, *supra* note 217

219. MERCIER, *supra* note 217, at 4–5. See e.g., Australia, Belgium, Canada, and Sweden.

220. MERCIER, *supra* note 217, at 4–5.

to business organizations.²²¹ The resultant concentration on the trading and foreign investment needs of corporations has led to an environment within many government circles in which the “public interest is increasingly conceptualized as a collective of private business interests.”²²²

One of the clearest examples of these forms of influence in the foreign investment context has been that of business organizations in the negotiating process of the Multilateral Agreement on Investment (“MAI”)²²³ through their permanent body at the Organisation for Economic Cooperation and Development (“OECD”), the Business and Industry Advisory Committee to the OECD (“BIAC”).²²⁴ BIAC lobbies the OECD on behalf of the business community.²²⁵ It was intimately involved in the framing of the agenda for the MAI negotiations and in drafting preparatory documents.²²⁶ BIAC’s relationship with the OECD provided investors with direct access to shaping the rules of what was to be a global legal framework for international investment. Furthermore, locating the drafting and negotiating of the MAI within the OECD inherently favored capital-exporting states.²²⁷ As OECD Member States were the sole formal participants in the negotiating process, developing states were effectively excluded from participation in the development of these global rules.²²⁸ Again, in a modern manifestation of the nineteenth century approach to the development of international law, the formulation of international investment law was being directed by capital-exporting states in close association with their investor nationals.

These developments point to the continuation of an alignment of state interests with those of foreign investors. They also indicate the

221. *Id.*

222. Lee, *supra* note 215, at 51.

223. See the text of the draft Multilateral Agreement on Investment (“MAI”) at OECD Negotiating Group on the Multilateral Agreement on Investment, Draft Consolidated Text, Apr. 22, 1998, <http://www1.oecd.org/daf/mai/pdf/ng/ng987rle.pdf> (last visited Sept. 2, 2008).

224. See Katia Tieleman, *The Failure of the Multilateral Agreement on Investment and the Absence of a Global Public Policy Network* (2000), http://www.gppi.net/fileadmin/gppi/Tieleman_MAI_GPP_Network.pdf (last visited Jan. 8, 2008).

225. See Business and Industry Advisory Committee to the OECD: The Voice of OECD Business, About BIAC, <http://www.biac.org/aboutus.htm> (last visited Nov. 4, 2009).

226. Tieleman, *supra* note 224, at 9.

227. SORNARAJAH, *supra* note 12, at 291–94.

228. OECD Member States are: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States.

continued influence of capital-exporting states on the substantive development of international investment law. Not only are its repressive origins reflected in the current one-sided nature of the rules of international investment law, but the colonial methodology of imposition remains alive as well.

C. *Environmental Regulation as Investment Treaty Violation*

One of the most insidious manifestations of the traditional relationship between foreign investors and the environment is the recent classification of host state environmental regulation as expropriation or a breach of fair and equitable treatment standards. Increasingly, international investment agreements are being invoked to challenge environmental and health regulation enacted by the host state.²²⁹ It is a move that allows foreign investors to encroach into the realm of domestic policy-making and regulation of the health and environment of the host state and its citizens.²³⁰ Conceptually, it is also a route by which foreign investors can attempt to perpetuate their traditional control of the environment of host states—in resisting the strengthening of environmental protection measures, they are also seeking to maintain the unimpeded use of the environment for their activities. It is a cultural approach based on indifference to the condition of the environment in host states and to the impact of their operations within it, stemming from a culture grounded in the imperialist framework developed during the seventeenth to early twentieth centuries.

1. *Indirect Expropriation*

The initiation of investor-state arbitration is an increasingly prevalent investor response to the introduction of new regulation by the host state.²³¹ Notable foreign investor challenges to host state

229. See e.g., *Methanex Corp. v. United States*, 44 I.L.M. 1345 (NAFTA Ch. Eleven Arb. Trib. 2005); *S.D. Myers, Inc.*, 40 I.L.M. 1408 (Partial Award, Decision on the Merits); *Ethyl Corp. v. Canada*, 38 I.L.M. 708 (NAFTA Ch. Eleven Arb. Trib. 2005) (Jurisdiction Phase, 1999); *Metalclad Corp. v. United Mexican States*, 40 I.L.M. 35 (ICSID 2001) (Award, Aug. 25, 2000); Notice of Intent to Submit a Claim to Arbitration under Section B of Chapter 11 of NAFTA, *Clayton v. Canada*, (NAFTA Ch. Eleven Arb. Trib. 2005), available at <http://www.appletonlaw.com/Media/2008/Bilcon%20NAFTA%20Notice%20of%20Intent.pdf> [hereinafter *Clayton Notice of Intent*]; *Unglaube v. Republic of Costa Rica*, No. ARB/08/01 (ICSID notice of intent registered Jan. 25, 2008).

230. Julie A. Soloway, *Environmental Regulation as Expropriation: The Case of NAFTA's Chapter 11*, 33 CAN. BUS. L.J. 92, 119 (2000); See Sands, *supra* note 61.

231. Peterson, *supra* note 61, at 123; see INTERNATIONAL INSTITUTE FOR SUSTAINABLE DEVELOPMENT, PRIVATE RIGHTS, PUBLIC PROBLEMS: A GUIDE TO NAFTA'S CONTROVERSIAL CHAPTER ON INVESTOR RIGHTS (2001), available at

environmental and health regulation include *Metalclad Corp. v. United Mexican States*,²³² *Ethyl Corp. v. Canada*,²³³ *Methanex Corp. v. United States*,²³⁴ *Azurix Corp. v. Republic of Argentina*,²³⁵ and *Tecnicas Medioambientales Tecmed, S.A. v. United Mexican States*.²³⁶

A key concern arising out of this trend is the misuse of investor protections.²³⁷ Although the traditional use of these protections was as a “shield” against arbitrary governmental action, they have recently become a mechanism with which to attack public welfare regulation. The implications of such a shift point to the possibility of investors restraining or shaping the development of host state public policy.²³⁸

Investor challenges of this nature are also a manifestation of the traditional relationship between foreign investors and the environment of host states. At its core, this strategy is an attempt to maintain access to the resources and domain of the host state in a form that suits the investor without regard for the domestic needs of the host state and the public interest issues involved in the proposed regulation. And, in this sense, it is a continuation of the nineteenth century conceptualization of the environment of the host state as a commodity for exploitation. The shifting use of investor protections to target public welfare regulation can also be tied into Anghie’s theories on reproducing imperialism.²³⁹ As the host state pursues its own policies, development plans, and public

http://www.iisd.org/pdf/trade_citizensguide.pdf.

232. *Metalclad Corp.*, 40 I.L.M. 35.

233. *Ethyl Corp.*, 38 I.L.M. 708 (Jurisdiction Phase, 1999).

234. *Methanex Corp.*, 44 I.L.M. 1345.

235. *Azurix Corp.*, 43 I.L.M. 262.

236. *Tecnicas Medioambientales Tecmed, S.A.*, 43 I.L.M. 133.

237. See Soloway, *supra* note 230; Sands, *supra* note 61; Peterson, *supra* note 61; Tienhaara, *supra* note 61; Nathalie Bernasconi-Osterwalder & Edith Brown Weiss, *International Investment Rules and Water: Learning from the NAFTA Experience*, in *FRESH WATER AND INTERNATIONAL ECONOMIC LAW* 263 (Edith Brown Weiss et al. eds., 2005); AARON COSBEY ET AL., INTERNATIONAL INSTITUTE FOR SUSTAINABLE DEVELOPMENT, INVESTMENT AND SUSTAINABLE DEVELOPMENT: A GUIDE TO THE USE AND POTENTIAL OF INTERNATIONAL INVESTMENT AGREEMENTS (2004), available at http://www.iisd.org/pdf/2004/investment_invest_and_sd.pdf.

238. See HOWARD MANN & KONRAD VON MOLTKE, INTERNATIONAL INSTITUTE FOR SUSTAINABLE DEVELOPMENT, NAFTA’S CHAPTER 11 AND THE ENVIRONMENT: ADDRESSING THE IMPACTS OF THE INVESTOR-STATE PROCESS ON THE ENVIRONMENT 62 (1999), available at <http://www.iisd.org/pdf/nafta.pdf>; Kara Dougherty, *Methanex v. United States: The Realignment of NAFTA Chapter 11 with Environmental Regulation*, 27 Nw. J. INT’L L. & BUS. 735, 743 (2007); see also the discussion in Vicki Been & Joel C. Beauvais, *The Global Fifth Amendment? NAFTA’s Investment Protections and the Misguided Quest for an International “Regulatory Takings” Doctrine*, 78 N.Y.U. L. REV. 30 (2003).

239. Anghie, *supra* note 46, at 505–06; see *Finding the Peripheries*, *supra* note 50.

welfare needs, it will inevitably constrain the previously unimpeded activities of investors. The investor response in using protections designed as a “shield” instead as a “sword”²⁴⁰ is a continuation of the imperialist pattern of manipulation of legal doctrine. It is an attempt to re-frame the use of a legal mechanism so as to support the commercial interests of foreign investors at the expense of the interests of the host state.

2. *Fair and Equitable Treatment*

Investor protection guarantees of “fair and equitable treatment” have been given an expansive interpretation in recent investor-state arbitration.²⁴¹ In considering whether the treatment standard has been breached, arbitral panels consider the legitimate expectations of the investor when entering into the investment.²⁴² This element has been interpreted as requiring the host state to inform the investor of all rules and regulations that will govern the investment for its duration and requiring the host state to maintain a stable legal and business framework throughout the term of the investment.²⁴³

The scope of this interpretation of “fair and equitable treatment” requirements under international investment agreements is particularly constraining for host states.²⁴⁴ Despite more recent moves to tighten the wide scope for investor claims,²⁴⁵ challenges to environmental regulation and environmental decision-making will continue. One of the most recent is *Clayton v. Canada*. A Notice of Intent to Submit a Claim to Arbitration was filed in February 2008 by an American investor against

240. MANN & VON MOLTKE, *supra* note 238; see the discussion in Been & Beauvais, *supra* note 238, at 35.

241. VAN HARTEN, *supra* note 107, at 88–90. Recent arbitral awards that adopt an expansive interpretation include *Azurix Corp.*, 43 I.L.M. 262 and *Tecnicas Medioambientales Tecmed, S.A.*, 43 I.L.M. 133.

242. MCLACHLAN ET AL., *supra* note 204, at 234.

243. *Occidental Exploration & Prod. Co. v. Republic of Ecuador*, No. UN3467 para. 183 (UNCITRAL 2004) (Award); *Tecnicas Medioambientales Tecmed, S.A.*, 43 I.L.M. at 173.

244. FIONA MARSHALL, INTERNATIONAL INSTITUTE FOR SUSTAINABLE DEVELOPMENT, FAIR AND EQUITABLE TREATMENT IN INTERNATIONAL INVESTMENT AGREEMENTS, 10 (2007), available at http://www.iisd.org/pdf/2007/inv_fair_treatment.pdf.

245. See for example, the award in *Methanex Corp.*, 44 I.L.M. 1345; see also U.S. Model Bilateral Investment Treaty art. 12(2) (2004), available at http://www.ustr.gov/assets/Trade_Sectors/Investment/Model_BIT/asset_upload_file847_6897.pdf?ht=:

Nothing in this Treaty shall be construed to prevent a Party from adopting, maintaining, or enforcing any measure otherwise consistent with this Treaty that it considers appropriate to ensure that investment activity in its territory is undertaken in a manner sensitive to environmental concerns.

Canada under the North American Free Trade Agreement (“NAFTA”).²⁴⁶ The investor alleges a breach of fair and equitable treatment as guaranteed under Article 1105 of NAFTA, arguing that an environmental review of its project was not consistent with the legitimate expectations of the investor or principles of due process.²⁴⁷ The investor is seeking damages of US\$188 million.²⁴⁸

Sornarajah questions the validity of the very emergence of the legitimate expectations element of the fair and equitable treatment standard, arguing that it is a product of recent partial “arbitral law-making” that is heavily weighted towards furthering the interests of foreign investors.²⁴⁹ He queries why the fair and equitable standard of treatment extends only to investors.²⁵⁰ Is it not fair and equitable, he asks, to allow host states to hold multinational corporations accountable for their activities?²⁵¹ Is it not fair and equitable to create defenses for host states where investors have engaged in conduct that violates human rights or harms the environment of the host state?²⁵² Fairness and equity,

246. *Clayton Notice of Intent*, *supra* note 229; North American Free Trade Agreement, Can.-Mex.-U.S. (Dec. 17, 1992) 32 I.L.M. 612 (1993).

247. *Id.* The investor also alleges a breach of the National Treatment and Most Favoured Nation Treatment provisions, Articles 1102 and 1103. The claim involves a proposed project to establish a basalt quarry and marine terminal development project at White Point in Nova Scotia, Canada. The proposal underwent a compulsory environmental review process and was rejected on environmental grounds by the Federal-Provincial Joint Review Panel. During the panel review, concerns were raised that the cumulative effects of the project would impact negatively on the North Atlantic Right Whale, the environmental quality of the bay, and the way of life of the local communities. The investor alleges that the Panel exceeded its mandate in considering “community core values” in addition to the physical environmental impacts of the project and that the environmental recommendations were in themselves flawed. *See* Press Release, Hugh Fraser, Clayton Family Files NAFTA Arbitration Notice of Intent for Unfair and Discriminatory Treatment (Feb. 5, 2008), *available at* <http://www.appletonlaw.com/Media/2008/Bilcon%20feb%20%205%20News%20Releas e.pdf>; David Jackson, *NAFTA Suit: Bilcon seeks US\$188 million in Damages Due to Digby Quarry Rejection*, THE CHRONICLE HERALD, Feb. 6, 2008, <http://www.stopatlantica.org/?q=node/231> (last visited Mar. 13, 2008); *see also* SIERRA CLUB OF CANADA, ATLANTIC CANADA CHAPTER, COMMENTS ON THE ENVIRONMENTAL IMPACT STATEMENT (EIS) OF THE WHITES POINT QUARRY AND MARINE TERMINAL PROJECT (Emily McMillan, ed. 2006), *available at* <http://www.ceaa.gc.ca/010/0001/0001/0023/001/WP-1637.pdf>.

248. *Clayton Notice of Intent*, *supra* note 229.

249. M. Sornarajah, *The Fair and Equitable Standard of Treatment: Whose Fairness? Whose Equity?*, in INVESTMENT TREATY LAW, CURRENT ISSUES II: NATIONALITY AND INVESTMENT TREATY CLAIMS; (Federico Ortino et al. eds., 2007), 165, 174, 176.

250. *Id.* at 180.

251. *Id.*

252. *Id.*

he asserts, would include provision for the protection of the environment, for health and safety measures, for labor standards, and for human rights.²⁵³

This Article argues that “fair and equitable treatment” protects only investors because international investment law in the twenty-first century remains the province of capital-exporting states. The host state remains the “other” within the framework of international investment law. The origins of international investment law continue to operate in the modern development of doctrine and in the interpretation of investment treaties. They can be seen in the continued tradition of linking capital-exporting states, investors, and the use of legal doctrine to advance the interests of foreign investors. And in seeking to assist with unimpeded access to the environment of the host state, the doctrines of international investment law perpetuate the nineteenth century relationship between foreign investors and the environments in which they operate. Despite the appearance of legal neutrality, the fair and equitable treatment requirements of compliance with the investor’s legitimate expectations and maintaining a stable legal and business environment, together with the non-availability of that standard to protect the host state, reproduce for the twenty-first century the imperialist origins of international investment law. As long as the system persists with solely protecting investors, these origins will remain embedded within international investment law and will continue to operate in the modern context.

IV. CONCLUSION: BREAKING FROM THE PAST

In examining the origins of international investment law, this Article has argued that the content and form of foreign investment protection law cannot be separated from its socio-political environment and that the context in which it emerged in the eighteenth and nineteenth centuries determined its core character. It was fundamental to the ultimate shape and approach of modern international investment law that the context in which its principles were developed was one of exploitation and imperialism.

The translation of European trading and investment principles into an international legal framework to protect investors in their encounters with the non-European world was an evolutionary process deeply entwined with Western imperialism. Legal doctrine was developed and manipulated by capital-exporting states to legitimize their use of repressive action in acquiring commercial advantages and protecting property. Through the assertion of foreign investment protection rules as

253. *Id.* at 175.

existing international law, together with the use of force, capital-exporting states directed the evolution of international investment law into a mechanism that protected only the investor. The colonial encounter created “otherness” in the concept of the host state, ensuring the exclusion of the host state from engagement with international investment law. As a result, the host state was, and remains, unable to call upon the rules of international investment law to address damage suffered as a result of the activities of foreign investors.

The close alignment of the interests of private investors with those of their home state was also a key tenet of the development of international investment law. The relationship went beyond the invocation of diplomatic protection and often inter-mingled commercial and sovereign functions. Furthermore, the trading companies were actively involved in the development of international legal doctrine that could be used to justify their activities. This historical association has had a profound impact on the development of international investment law, establishing an alignment between the state and investor within the very nature of the law. This continues to be felt in the twenty-first century. Private commercial interests influence capital-exporting state policy, investor involvement in “commercial diplomacy” has intensified, and capital-exporting states continue to direct the substantive development of international investment law. The result is our current one-sided international investment protection regime.

The traditional approach of investors to the environment of the host state shaped the modern relationship between foreign investors and the environment. The environmental practices of European investors, traders, and colonizers from the seventeenth to early twentieth centuries, in which the resources of colonized nations and host states were viewed as a commodity for the use of Western interests, generated the narrow conceptualization of the environment that is reflected in modern international investment law. This approach is reproduced in the current indifference of international investment law to the impact of investor activity on the environment of host states, the focus on investor protection, and the reluctance of capital-exporting states to integrate environmental considerations into international investment rules. The protection of the modern investor through the development and manipulation of legal doctrine, such as *forum non conveniens*, separate corporate legal personality, and judicial comity, also reproduces the links between law and the interests of capital-exporting states and their nationals that were established in the colonial era.

Investor challenges to environmental regulation are a further manifestation of the traditional relationship between foreign investors and the environment of the host state—in seeking to prevent the raising of environmental standards, investors are also attempting to maintain the

unimpeded use of the environment for their operations. This investor indifference to the condition of the environment of host states, and to the impact of their operations within it, is part of a cultural approach to the host state which dominated the emergence of international investment law and has pervaded it ever since. The characterization of environmental regulation as hostile to the interests of foreign investors and in need of neutralizing is a modern manifestation of this investment culture of control and indifference grounded in the imperialist framework that developed during the seventeenth to early twentieth centuries. And international investment law has played a crucial role in perpetuating that culture.

Maintaining this imperialist character in the twenty-first century is, however, a political choice. Capital-exporting states can take an alternate political route and instead seek to bring about an inclusive and balanced international legal framework for the regulation of international investment. What steps, then, may be taken towards halting the current pattern?

Setting the course for a new path in international investment law requires substantive reorientation of its principles, new approaches within international investment agreements, and procedural reform in investor-state dispute resolution. It requires the inception of genuine dialogue between capital-exporting states, capital-importing states, and other stakeholders and non-state actors. To begin this process of reconceptualizing international investment law, the International Institute for Sustainable Development has put forward a *Model International Agreement on Investment for Sustainable Development* (the "IISD Agreement").²⁵⁴ The proposed substantive reform entails addressing the imbalance in rights and obligations of the investor, host state, and home state. To this end, the IISD Agreement seeks to maintain high levels of investor protection,²⁵⁵ but also to prescribe social and environmental obligations to the investor,²⁵⁶ to preserve host state rights to regulate in the public interest,²⁵⁷ to ensure that foreign investment contributes to sustainable development in the host country,²⁵⁸ and to enable the use of home state courts for civil actions for significant damage, personal injury, or loss of life in the host state as a result of acts or decisions of the

254. See MANN ET AL., *supra* note 107.

255. *Id.* at 12–20, art. 5–10.

256. *Id.* at 22–30, art. 12–18.

257. *Id.* at 38–39, art. 25(B).

258. *Id.* at 4, art. 1.

investor.²⁵⁹ The IISD Agreement also includes the promotion of sustainable development in the Preamble and Objectives provisions.²⁶⁰

Bringing about a break with the past also requires reform of the current system of dispute resolution for investor-state arbitration. It is crucial that the current decentralized structure comprising non-accountable, temporary tribunals is replaced with a permanent two-tier forum incorporating an appeals facility, together with appropriate procedural rules on public access and acceptance of *amicus curiae* briefs.²⁶¹ This would address many of the transparency, consistency, and legitimacy concerns expressed by commentators.²⁶² Ideally, this type of reform would also assist with the reconsideration of current expansive interpretations of investor protection rules, such as the fair and equitable treatment standard and indirect expropriation.

Politically, there is a reluctance to loosen the international investor protection regime that has been carefully constructed and controlled by capital-exporting states for the last 200 years.²⁶³ However, as developed states begin to find themselves on the receiving end of investor-state complaints, there is increasing support for a global investment regime that takes better account of the needs of host states.²⁶⁴ As such, it is possible that the first steps towards a more balanced conceptualization of international investment law will involve incorporating some of the suggestions set out above. It will, however, take a substantial reorientation of the current principles and approach of international investment law before it can be said that it no longer remains locked in a pattern of reproducing economic imperialism.

259. *Id.* at 28–29, art. 17.

260. *Id.* at 2, art. 1.

261. VAN HARTEN, *supra* note 107.

262. *See, e.g.*, VAN HARTEN, *supra* note 107; Tienhaara, *supra* note 61.

263. COSBEY ET AL., *supra* note 237, at 27; VAN HARTEN, *supra* note 107, at 179.

264. SANDS, *supra* note 82, at 121–22, 139–41.

Applying Human Rights Norms to Climate Change: The Elusive Remedy

Pamela Stephens*

*Human solidarity manifests itself not only in a **spacial** dimension—that is, in the space shared by all the peoples of the world—but also in a **temporal** dimension—that is among the generations who succeed each other **in the time**, taking the past, present and future altogether. It is the notion of human solidarity, understood in this wide dimension, and never that of State sovereignty, [on] which lies . . . the basis of the whole contemporary thinking on the rights inherent to the human being.¹*

I. INTRODUCTION

Much has been written about the growing impact of Global Climate Change on human rights as diverse as life, health, property and culture.² This article addresses the broad question of the extent to which international human rights norms may be asserted to protect current and

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1. Case of *Bámaca-Velásquez*, Judgment of Nov. 25, 2000, INTER-AM. CT. H.R. (Ser. C) No. 70 (July 25, 2000), separate opinion of Judge A.A. Cançado-Trindade.

2. See, e.g., Rosemary Reed, *Rising Seas and Disappearing Islands: Can Island Inhabitants Seek Redress Under the Alien Tort Claims Act?*, 11 PAC. RIM. L. & POL'Y J. 399 (2002); Randall S. Abate, *Climate Change, The United States, and the Impacts of Arctic Melting: A Case Study in the Need for Enforceable International Human Rights*, 43A STAN. J. INT'L. L. 3 (2007); Sara C. Aminzadeh, *A Moral Imperative: The Human Rights Implications of Climate Change*, 30 HASTINGS INT'L & COMP. L. REV. 231 (2007); Sheila Watt-Cloutier, *Global Warming and Human Rights*, <http://www.earthjustice.org/library/references/Background-for-IAHRC.pdf> (last visited Nov. 12, 2009).

future generations from the effects of global climate change. Part II of the article will consider potentially applicable norms in both treaty law and customary international law. Part III will explore the procedures for asserting these rights in the United States' national courts and the substantive and procedural hurdles for doing so. The principal focus of this exploration will be claims in federal court under the Alien Tort Statute ("ATS")³ and under the general federal question statutory grant.⁴ The possibility of raising these international human rights norms in state courts will also be considered. Finally, Part IV will discuss raising such claims in a regional or international forum, in particular the Inter-American Commission on Human Rights ("IACHR"), addressing again the substantive and procedural hurdles for doing so.

The article concludes that while such claims may not be entirely foreclosed, they are unlikely to succeed until the international norms are clearer and more universally accepted. Standing and other justiciability issues will prove difficult to overcome in some of these cases; however, the main obstacles to overcome will be subject matter jurisdiction, the related issue of failure to state a claim upon which relief may be granted in national courts, and problems regarding lack of enforcement in the international fora.

II. ESTABLISHING APPLICABLE NORMS

This section proceeds on the basis of two assumptions. First, I assume that generally a prerequisite to establishing human rights protections for future generations will require establishing that such rights protect the present generation.⁵ My second assumption is that elsewhere the theoretical justifications for protecting intergenerational interests have been laid out and that those theoretical justifications will form a part of the context for asserting human rights claims.⁶ Finally, I would also assert a caveat with regard to the rights discussed below (which may be evident), and that is that even if one were generally able to establish the existence of a particular norm under either treaty or customary international law, establishing that the content of that norm encompasses the effects of global climate change will still be problematic. Most of the international law discussed in this paper precedes concerns about global climate change, and therefore those

3. 28 U.S.C. § 1350 (2008).

4. 28 U.S.C. § 1331 (2008).

5. There may be exceptions to this one. For example, to posit an express right for future generations to be free from present generation impact on the climate.

6. See, e.g., Burns Weston, *Climate Change and Intergenerational Justice: Foundational Reflections*, 9 VT. J. ENVTL. L. 375 (2008).

concerns are not explicitly addressed in that treaty law or elsewhere. Also, most international human rights law establishes the rights of individuals (or groups) versus governments, either requiring governments to do, or to refrain from doing, something. However, issues regarding global climate change frequently arise because of the actions of non-state actors.⁷

Having said all of that, let me further frame the nature of the discussion in this paper. One certainly could try to assert an international human right to be protected from the effects of global climate change. However, given the current development of the law in the environmental and human rights areas, the probability of establishing such a norm at this time seems extremely low.⁸ Therefore, the paper will not argue for such a “global” human right, but will instead seek to reframe existing human rights norms to encompass the impacts of climate change on humans.⁹ Those norms which seem to be the most promising for this purpose, including the right to life, the rights of indigenous peoples, and the right to privacy, will be emphasized, though other socio-economic rights will also be referenced.

A. Right to Life

Of the possible human rights norms that might be asserted by victims of global climate change, the right to life is the most widely acknowledged in both binding and nonbinding international instruments.¹⁰ Clearly, arbitrary deprivation of life in the form of

7. See Dinah Shelton, *Protecting Human Rights in a Globalized World*, 25 B.C. INT'L & COMP. L. REV. 273, 279 (2002).

8. “Nearly all global and regional human rights bodies have considered the link between environmental degradation and internationally guaranteed human rights. In most instances, the complaints brought have not been based upon a specific right to a safe and environmentally sound environment, but rather upon rights to life, property, health, information, and family and home life.” ALEXANDRE KISS & DINAH SHELTON, *GUIDE TO INTERNATIONAL ENVIRONMENTAL LAW* 240 (2007).

9. This is an idea that has been raised by others. See, e.g., Sumudu Atapattu, *The Right to a Healthy Life or the Right to Die Polluted?: The Emergence of a Human Right to a Healthy Environment Under International Law*, 16 TUL. ENVTL L.J. 65 (2002); Aminzadeh, *supra* note 3, at 245 (“There are arguably three viable strategies for constructing a human rights-based approach to climate change: 1) the application of procedural rights found in international human rights law to climate change litigation; 2) the recognition of a distinct right to environmental well-being; and 3) the reinterpretation of existing human rights in the environmental context.”).

10. See, e.g., Universal Declaration of Human Rights, art. 3, G.A. Res. 217A, at 71, U.N. GAOR, 3d Sess., 1st plen. mtg., U.N. Doc. A/810 (Dec. 10, 1948) [hereinafter UDHR], (“Everyone has the right to life, liberty, and security of person”); International Covenant on Civil and Political Rights, art. 6, Dec. 16, 1966, 999 U.N.T.S. 171, 56 U.S.

summary execution fits within this language. The question remains: what else does? What must the right to life encompass in order to be useful to victims of climate change? While threats to human life may violate this right,¹¹ how imminent must the threat be? It seems that in order for victims of climate change to assert this right, two conditions must be met. First, a broad definition of the right to life must be accepted, and second, the longer term threat to human existence must be accepted as grounds for asserting the right.

There is evidence that the international community is starting to accept a broad view of the right to life. The IACHR seems to have embraced such a broad view, at least in the context of indigenous peoples.¹² The International Covenant on Civil and Political Rights (“ICCPR”) Committee on Human Rights, in General Comment 6, has stated:

[T]he Committee has noted that the right to life has been too often narrowly interpreted. The expression “inherent right to life” cannot properly be understood in a restrictive manner, and the protection of this right requires that States adopt positive measures. In this connection, the Committee considers that it would be desirable for States’ parties to take all possible measures to reduce infant mortality and to increase life expectancy, especially in adopting measures to eliminate malnutrition and epidemics.¹³

Dep’t State Bull. 107, *reprinted in* 6 I.L.M. 360 (1967) [hereinafter ICCPR] (“Every human being has the inherent right to life. This right shall be protected by law. No one shall be arbitrarily deprived of his life”); The European Convention for the Protection of Human Rights and Fundamental Freedoms, art. 2, Nov. 4, 1950, 213 U.N.T.S. 221, E.T.S. 5 [hereinafter European Convention] (“Everyone’s right to life shall be protected by law . . .”); The American Convention on Human Rights, art. 4, Nov. 22, 1969, 1114 U.N.T.S. 123, O.A.S.T.S. No. 36, O.A.S. Off. Rec. O.E.A./Ser. L/V/II.23 doc. 21 rev 6 (1979), *reprinted in* 9 I.L.M. 673 (1970) [hereinafter American Convention] (“1. Every person has the right to have his life respected. This right shall be protected by law and, in general, from the moment of conception”); The African Charter on Human and Peoples’ Rights (Banjul Charter), art. 4, June 27, 1980, OAU Doc. CAB/LEG/67/3 rev.5, *reprinted in* 21 I.L.M. 58 (1982) [hereinafter African Charter] (“Human beings are inviolable. Every human being shall be entitled to respect for his life and the integrity of his person.”).

11. *See, e.g.,* K.N.L.H. v. Peru, Communication No. 1153/2003, U.N. Doc. CCPR/C/85/D/1153/2003/Rev.1 (Aug. 14, 2006) (U.N. Hum. Rts. Comm.) (“It is not only taking a person’s life that violates Article 6 of the Covenant but also placing a person’s life in grave danger, as in this case”) (Committee Member Hipolito Solari-Yrigoyen, dissenting). The majority chose not to address the Article 6 complaint, because it found that Article 7 on inhumane treatment applied.

12. *See infra* notes 20-50 and accompanying text.

13. U.N. Hum. Rts. Comm., General Comment 6 of ICCPR (16th sess., 1982), *Compilation of General Comments and General Recommendations Adopted by Human Rights Treaty Bodies*, U.N. Doc. HRI/GEN/1/Rev. 1 at 6 (1994).

There are also scholars who advocate for broad definitions of the right to life. For example, one human rights scholar defines the right to life as one that enables each individual to: “have access to the means of survival; realize full life expectancy; avoid serious environmental risks to life; and to enjoy protection by the state against unwarranted deprivation of life.”¹⁴

The right to life has been asserted in cases raising environmental claims. The IACHR, applying the American Declaration of the Rights and Duties of Man,¹⁵ considered the Brazilian government’s act of constructing a highway through the Yanomami territory, which caused serious environmental harm. It found that the Yanomami, as a group, were deprived of their “rights to life, liberty and personal security (Article I); the right to residence and movement (Article VIII); and the right to the preservation of health and well-being.”¹⁶

In summary, while broad interpretations of some treaty language seem to support an argument under those treaties that the right to life might encompass harms caused by global climate change, nothing approaching consensus has been reached in this regard. Moreover, though signs are encouraging that such a norm may be emerging,¹⁷ there is neither a sufficiently universal practice nor the *opinio juris* to establish a customary international law rule for the right to life that encompasses such environmental harms.¹⁸

14. B.G. Ramcharan, *The Concept and Dimension of the Right to Life*, in *THE RIGHT TO LIFE IN INTERNATIONAL LAW* 7 (B.G. Ramcharan ed., 1985). See also Luis E. Rodriguez-Rivera, *Is the Human Right to Environment Recognized under International Law? It Depends on the Source*, 12 *COLO. J. INT’L. ENVTL. L. & POL’Y* 1, 19 (2001).

15. American Declaration of the Rights and Duties of Man, Mar. 30-May 2, 1948: OAS Res XXX, OAS Off Rec OEA/Ser.L./V/I.4 Rev.

16. Pueblo Yanomami v. Brazil, Case 7615, Inter-Am. C.H.R., Res. No. 12/85, OEA/Ser. L./II.66, doc. 10 rev. 1 (Oct. 1, 1985); see Atapattu, *supra* note 10, at 99-101.

17. “Today, more than 100 constitutions throughout the world guarantee a right to a clean and healthy environment, impose a duty on the state to prevent environmental harm, or call for protection of the environment or natural resources. Constitutional environmental rights are increasingly being enforced by courts in countries from Argentina to India to South Africa. In addition, courts interpreting and enforcing other rights have recognized that violations of them may be the result of a degraded environment. International human rights tribunals also have come to view environmental protection as essential for the enjoyment of certain internationally guaranteed human rights, especially the rights to life, health, home life, and property.” KISS & SHELTON, *supra* note 9, at 238.

18. In order to establish that custom has become binding law, international law has traditionally looked to the nature and duration of custom and the way that custom is viewed by states. See, e.g., RESTATEMENT (THIRD), FOREIGN RELATIONS LAW OF THE UNITED STATES, § 102(2) (“Customary international law results from a general and consistent practice of states followed by them from a sense of legal obligation.”). For a

B. Rights of Indigenous Peoples

What I would characterize as a cluster or an aggregate group of norms focused upon the rights of indigenous peoples has begun to emerge in both treaty and case law. This cluster draws upon traditional norms, such as the right to life, the right to property, and the right to health. These rights will be considered as a group under the heading of indigenous peoples' rights because: first, that is the way in which they are being asserted and upheld; and second, the assertion of these norms may have special salience in the context of global climate change given the disparate impact of such change on island and other indigenous groups.¹⁹ The special status of indigenous peoples in international law²⁰ may present an opportunity to assert human rights claims on their behalf based upon the impacts of global climate change. And, the recent Inuit petition²¹ before the IACHR may serve as a model for such claims. Professor James Anaya, grounding his argument in the right of self-determination,²² has characterized modern decisions regarding indigenous peoples as defining a right to cultural integrity.²³ Such a norm "goes beyond ensuring for indigenous *individuals* either the same civil and political freedoms accorded others within an existing state" and

lengthy discussion of the process by which norms generally and environmental norms in particular become customary international law, see Hari Osofsky, *Environmental Human Rights Under the Alien Tort Statute: Redress for Indigenous Victims of Multinational Corporations*, 20 SUFFOLK TRANSNAT'L L. REV. 335, 348-81 (1997).

19. See Reed, *supra* note 3; Abate, *supra* note 3; see also Intergovernmental Panel on Climate Change 2007 Assessment Report, Summary for Policy Makers, available at http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_spm.pdf [hereinafter IPCC 2007 Report] (last visited Nov. 12, 2009).

20. See Declaration on the Rights of Indigenous Peoples, G.A. Res. 61/295, U.N. Doc. A/Res/47/1 (Sept. 7, 2007), reprinted in 46 I.L.M. 10013 (2007); see also Osofsky, *supra* note 19; Alessandro Fodella, *International Law and the Diversity of Indigenous Peoples*, 30 VT. L. REV. 565 (2006); Resolution of the IACHR on the Problem of Special Protection for Indigenous Populations, Inter-Am. C.H.R., OEA/Ser.L/V/II.29, doc. 38 rev. (1972); Report of the Situation of Human Rights of a Segment of the Nicaraguan Population of Miskito Origin, Inter-Am. C.H.R., OEA/Ser.L/V/II.62, doc. 10 rev. 3 (1983) at 81 § 2-B-15.

21. Sheila Watt-Cloutier, *Petition to the Inter-American Commission on Human Rights Seeking Relief From Violations Resulting From Global Warming Caused by Acts and Omissions of the United States*, Dec. 7, 2005, available at http://www.earthjustice.org/library/legal_docs/petition-to-the-inter-american-commission-on-human-rights-on-behalf-of-the-inuit-circumpolar-conference.pdf (last visited Nov. 12, 2009).

22. See, e.g., ICCPR, *supra* note 11, art. 1(1) ("All peoples have the right of self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development.").

23. S. JAMES ANAYA, *INDIGENOUS PEOPLES IN INTERNATIONAL LAW* 98-104 (1996).

in addition “upholds the right of indigenous *groups* to maintain and freely develop their cultural identities in coexistence with other sectors of humanity.”²⁴ Professor Anaya finds this to be a very broadly applicable right, arguing:

While in principle the cultural integrity norm can be understood to apply to all segments of humanity, the norm has developed remedial aspects particular to indigenous peoples in light of their historical and continuing vulnerability Even as . . . policies [of assimilation] have been abandoned or reversed, indigenous cultures remain threatened as a result of the lingering effects of those historical policies and because, typically, indigenous communities hold a nondominant position in the larger societies in which they live.²⁵

I have argued elsewhere²⁶ that the general concept of cultural integrity suggests two more specific norms: first, one that recognizes the special relationship of indigenous peoples to their lands and the natural resources contained therein;²⁷ second, an “argument could be made under the Genocide Convention, these peoples have a specific claim to make regarding the destruction of their culture.”²⁸ With regard to the first potential norm, although it rejected the Inuit Petition,²⁹ the IACHR (in accord with the UN Human Rights Commission) has recognized the importance of lands and resources to the survival of indigenous cultures.³⁰ “It follows from indigenous peoples’ articulated ideas of communal stewardship over land and a deeply felt spiritual connection with the earth and its fruits.”³¹ “Indigenous peoples, furthermore, typically have looked to a secure land and natural resource base to ensure the economic viability and development of their communities.”³² In a 1997 Report on the Human Rights Situation in Ecuador, the IACHR stated:

24. *Id.* at 98.

25. *Id.* at 102.

26. Pamela J. Stephens, *Indigenous Peoples, Culturally Specific Rights and Domestic Courts: A Response to Professor Fodella*, 30 VT. L. REV. 595 (2006).

27. *Id.* at 602.

28. *Id.*; see also Convention on the Prevention and Punishment of the Crime of Genocide arts. 2-3, Dec. 9, 1948, 78 U.N.T.S. 277 [hereinafter Genocide Convention].

29. See *infra* notes 35-36 and accompanying text.

30. See ANAYA, *supra* note 24, at 104-105.

31. S. James Anaya, *International Human Rights and Indigenous Peoples: The Move Toward the Multicultural State*, 21 ARIZ. J. INT’L & COMP. L. 13, 35-36 (2004).

32. S. James Anaya, *Indigenous Peoples’ Participatory Rights in Relation to Decisions About Natural Resource Extraction: The More Fundamental Issue of What Rights Indigenous Peoples Have in Lands and Resources*, 22 ARIZ. J. INT’L & COMP. L. 7, 8 (2005); see also Bernard Ominayak, Chief of the Lubicon Lake Band v. Canada, U.N. Doc. Supp. No. 40 (A/45/40), at 1 (1990).

Within international law generally, and inter-American law specifically, special protections for indigenous peoples may be required for them to exercise their rights fully and equally with the rest of the population. Additionally, special protections for indigenous peoples may be required to ensure their physical and cultural survival—a right protected in a range of international instruments and conventions.³³

Several rights based upon this sense of connectedness to the land and the reliance of culture upon that connectedness were argued on behalf of the Inuit Petition.

However, in November 2006, the IACHR rejected the Inuit Petition, stating that it would “not be able to process [the] petition at present [T]he information provided does not enable us to determine whether the alleged facts would tend to characterize a violation of rights protected by the American Declaration.”³⁴ The Commission subsequently agreed to hold a hearing to consider the relationship between climate change and human rights. Testimony before it specifically addressed the following: the right to use and enjoy property; the right of peoples to enjoy the benefits of culture; and the rights to life, physical integrity and security.³⁵ The Commission has taken no further action.

In addition to the above, there is also evidence of state practice in this area.³⁶ States have included constitutional protections for the environmental rights of indigenous peoples.³⁷

In particular, Panama’s Constitution “recognizes and respects the ethnic identity of national indigenous communities. Peru notes indigenous peoples” autonomy with respect to “abuse of the land.” Guatemala devotes a chapter of its constitution to indigenous affairs. The constitutional provisions in countries with substantial numbers of

33. Inter-Am. C.H.R., *Report on the Situation of Human Rights in Ecuador*, OEA/ser.L/V/II.96, doc. 10, rev. 1-ch. IX, ¶ 53 (Apr. 24, 1997).

34. See Posting of Bill Weinberg to World War 4 Report, <http://ww4report.com/node/2922> (last visited Nov. 12, 2009).

35. See Martin Wagner, Testimony Before the Inter-American Commission on Human Rights (Mar. 1, 2007), *available at* http://www.ciel.org/Publications/IACHR_Wagner_Mar07.pdf (last visited Nov. 12, 2009); see also Watt-Cloutier, *Global Warming and Human Rights*, *supra* note 3.

36. See discussion in Osofsky, *supra* note 19, at 387.

37. See discussion in Raedza Torres, *The Rights of Indigenous Populations: The Emerging International Norm*, 16 YALE J. INT'L L. 127, 166 (1991) (citing the constitutions of Panama, Peru, and Guatemala). See also Osofsky, *supra* note 19, at 387 (citing various examples of regional groups and nations which reported on constitutional and legislative measures to protect indigenous rights).

indigenous peoples indicate a growing state practice recognizing their special status.³⁸

With regard to the Genocide Convention, the focus of the argument on behalf of indigenous peoples would be on the destruction of the environment. The Genocide Convention prohibits “[d]eliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part.”³⁹ However, the Convention also requires that the acts constituting genocide be “committed with intent to destroy, in whole or in part, a national, ethnical, racial or religious group, as such.”⁴⁰ The argument has been made by at least one commentator that greenhouse gas emissions resulting in rising seas constitute genocide against people living on low-lying islands,⁴¹ but this is an argument that is unlikely to prevail. Arguably, with specific environmental harms perpetrated against an indigenous community, for example, by oil and gas extraction companies, it might be possible to infer the requisite intent necessary to establish a form of genocide.⁴² Although the Trial Chamber of the International Criminal Tribunal for Rwanda in *Akayesu* has held that the specific intent element of the Convention could be inferred from the physical acts of the alleged perpetrator and their “massive and/or systematic nature or their atrocity,”⁴³ the court was referring to a situation in which the acts were clearly directed at a protected group. In the context of global climate change, while various actors—government and private—may engage in activities, which result in the destruction of the environment upon which an indigenous people depends, these acts are not specifically directed to that peoples and it is thus much more difficult to infer the requisite specific intent.

Moreover, establishing the *actus reus* of the crime of genocide in this context may prove just as difficult: that an actor, state or non-state, engaged in “deliberately inflicting on the group conditions of life calculated to bring about its destruction in whole or in part.”⁴⁴ Given the drafting history of this provision it is probably fair to read it as reaching conduct that would deprive the group of all means of livelihood.⁴⁵ This language of the Convention was meant to cover the imposition of conditions of life similar to the concentration camps of World War II.

38. Osofsky, *supra* note 19, at 387.

39. Genocide Convention, *supra* note 29, art. 2(c).

40. *Id.* art. 2.

41. *See* Reed, *supra* note 3.

42. *See* Stephens, *supra* note 27, at 606-07.

43. Prosecutor v. Akayesu, Case No. ICTR 96-4-T, Judgment, ¶ 478 (Sept. 2, 1998).

44. Genocide Convention, *supra* note 29, art. 2(c).

45. *See* Stephens, *supra* note 27, at 606-07.

But an “early draft also acknowledged that a second category of acts might fit within this concept: ‘the deprivation of all means of livelihood, by confiscation of property, looting, curtailment of work, and denial of housing and of supplies otherwise available to the other inhabitants of the territory concerned.’”⁴⁶ The difficulty lies in showing that the acts of a corporation or state were “calculated to bring about [the group’s] destruction.”⁴⁷

My last comment regarding the potential of making a “genocide” argument for the effects of global warming has to do with efforts to assert a right to be free from “cultural genocide.”⁴⁸ While such a norm might be desirable, its assertion under the Genocide Convention is clearly foreclosed by the drafting history of the Convention,⁴⁹ nor has the development of the law of genocide since the Convention recognized such a norm.

C. Right to Privacy

The right to privacy is another broadly established, widely accepted norm of international human rights law. It is important to treat this as a separate right and not to subsume it in the right to life discussion, in part because there is case law applying this right in the environmental area. Found in virtually all internationally binding and nonbinding human rights agreements, the formulation varies only slightly.⁵⁰ Once again the

46. *Id.* (citing WILLIAM A. SCHABAS, *GENOCIDE IN INTERNATIONAL LAW: THE CRIME OF CRIMES* 165 (Cambridge University Press 2000)).

47. Genocide Convention, *supra* note 29, art. 2(c).

48. *See, e.g.*, *Beanal v. Freeport-McMoran, Inc.*, 969 F. Supp 362, 372 (E.D. La. 1997).

49. When the Genocide Convention was being drafted, some national representatives argued for a separate article on cultural genocide:

In this convention, genocide also means any of the following deliberate acts committed with the intention of destroying the language or culture of a national, racial or religious group on grounds of national or racial origin or religious belief: (1) prohibiting the use of the language of the group in daily intercourse or in schools, or prohibiting the printing and circulation of publications in the language of the group; (2) destroying, or preventing the use of, the libraries, museums, schools, historical monuments, places of worship or other cultural institutions and objects of the group.

SCHABAS, *supra* note 47, at 182 (quoting U.N. ESCOR, Ad Hoc Comm. on Genocide, 6th Session, 14th meeting, at 13, UN Doc. E/AC.25/SR. 14 (1948)). Schabas also notes that the drafters ultimately limited the acts of genocide to essentially physical acts to achieve wide spread agreement. *Id.* at 178-85 (describing the debate about whether to include cultural genocide within the definition of genocide and the final vote to exclude cultural genocide from this definition).

50. *See, e.g.*, UDHR, *supra* note 11, art. 12 (“No one shall be subjected to arbitrary

issue is the extent to which this right can be read to encompass the claims of victims of global climate change. There are a few cases that have addressed the right to privacy in relation to what might be characterized as environmental rights.⁵¹ For example, in 1990, a Spanish national Gregoria Lopez Ostra brought a case before the European Commission of Human Rights alleging that her right to privacy under the European Convention was being violated.⁵² The source of the violation was a waste treatment plant located very close to her home, which was emitting noxious fumes and noise.⁵³ The local government and the State of Spain had failed to address her concerns.⁵⁴ The Commission found a violation of Article 8, the privacy provision of the Convention,⁵⁵ and the European Court of Human Rights confirmed. The Court held:

Whether the question is analyzed in terms of a positive duty on the State—to take reasonable and appropriate measures to secure the applicant’s rights under paragraph 1 of Article 8—as the applicant wishes in her case, or in terms of an “interference by a public authority” to be justified in accordance with paragraph 2, the applicable principles are broadly similar. In both contexts regard must be had to the fair balance that has to be struck between the

interference with his privacy, family, home or correspondence, nor to attacks upon his honour and reputation. Everyone has the right to the protection of the law against such interference or attacks”); European Convention, *supra* note 11, art. 8 (“Everyone has the right to respect for his private and family life, his home and his correspondence.”); American Convention, *supra* note 11, art. 11 (“No one may be the object of arbitrary or abusive interference with his private life, his home, or his correspondence, or of unlawful attacks on his honor or reputation.”).

51. *See, e.g.*, Powell & Rayner v. United Kingdom, 172 Eur. Ct. of H.R. (ser. A) (1990); Case of Skärby v. Sweden, 180-B Eur. Ct. of H.R. (ser. A) (1990); Arrondelle v. United Kingdom, App. No. 7889/77, 23 Y.B. Eur. Conv. on H.R. 166 (1980) (Eur. Comm’n on H.R.); Lopez Ostra v. Spain [hereinafter Lopez Ostra], App. No. 16798/90, 20 Eur. H.R. Rep. 277 (1995). *See generally* Richard Desgagne, *Integrating Environmental Values into the European Convention on Human Rights*, 89 AM. J. INT’L L. 263 (1995).

52. Lopez Ostra, *supra* note 52, ¶ 30.

53. *Id.* ¶ 8.

54. *Id.* ¶¶ 9–15.

55. Which provides:

1. Everyone has the right to respect for his private and family life, his home and his correspondence.
2. There shall be no interference by a public authority with the exercise of this right except such as is in accordance with the law and is necessary in a democratic society in the interests of national security, public safety or the economic well-being of the country, for the prevention of disorder or crime, for the protection of health or morals or for the protection of the rights and freedoms of others.

European Convention, *supra* note 11, art. 8.

competing interests of the individual and of the community as a whole, and in any case the State enjoys a certain margin of appreciation Having regard to the foregoing and despite the margin of appreciation left to the respondent State, the Court considers that the State did not succeed in striking a fair balance between the interest of the town's economic well-being—that of having a waste-treatment plant—and the applicant's effective enjoyment of her right to respect for her home and her private and family life.⁵⁶

These specific interpretations of the right to privacy under the European Convention are interesting and may provide the basis to argue for the development of such a norm more generally, but, as of now, would appear to be insufficient evidence of a customary international law rule.

D. Other Socio-Economic Rights

There is a set of socio-economic rights set out in international and regional documents, including rights to property, to an adequate standard of living, to food, and to health, which perhaps might be invoked to protect those impacted by global climate change.⁵⁷ While arguments can certainly be made that these are binding norms, in that many of them appear in binding international treaties,⁵⁸ the question remains regarding an agreed upon content to the norms and the nature of the obligation to which a State has bound itself in signing these agreements. One need not take the position that a right to health or a right to food is not a binding norm to understand that there is not general agreement about the nature of a State's obligation to ensure that health or a certain level of food. For example, what precisely is meant by the International Covenant on Economic, Social and Cultural Rights ("ICESCR") right to be free from hunger as described in Article 11? In accordance with the ICESCR's

56. Lopez Ostra, *supra* note 52, Judgment, ¶¶ 51, 58.

57. See, e.g., UDHR, *supra* note 11, art. 17 (Right to Property), art. 25 (Right to adequate Standard of Living); International Covenant on Economic, Social and Cultural Rights art. 11 (Rights to an Adequate Standard of Living and to be Free from Hunger), Dec. 16, 1966, 993 U.N.T.S. 3, *reprinted in* 6 I.L.M. 360 (1967) [hereinafter ICESCR]; African Charter, *supra* note 11, art. 14 (Right to property), art. 16 (Right to Health), art. 22 (Right to Economic, Social and Cultural Development), Convention on the Rights of the Child art. 24 ("right of the child to the enjoyment of the highest attainable standard of health" and requiring the State to combat disease and malnutrition, "taking into consideration the dangers and risks of environmental pollution"), Nov. 20, 1989, 1577 U.N.T.S. 3, *reprinted in* 28 I.L.M. 1448 [hereinafter CRC].

58. It should be noted that the United States is not a party to two of the most significant of these binding treaties, the Convention of the Rights of the Child and the International Covenant on Economic, Social and Cultural Rights.

formula of progressive implementation of rights, the treaty sets out the right generally and then sets out steps that should be taken by a State “to the maximum of its available resources, with a view to achieving progressively the full realization of the rights recognized.” So, in Article 11, the Covenant states:

2. The States Parties to the present Covenant, recognizing the fundamental right of everyone to be free from hunger, shall take individually and through international co-operation, the measures, including specific programmes, which are needed:

(a) to improve methods of production, conservation and distribution of food by making full use of technical and scientific knowledge, by disseminating knowledge of the principles of nutrition and by developing or reforming agrarian systems in such a way as to achieve the most efficient development and utilization of natural resources;

(b) taking into account the problems of both food-importing and food-exporting countries, to ensure an equitable distribution of world food supplies in relation to need.⁵⁹

This does not even begin to approach a formula for determining the precise nature of a State’s obligation to protect the food supplies of its citizens. Even those who advocate for implementation of a right to food⁶⁰ concede that the conventional right to food “evokes obligations that are fluid”⁶¹ and that “[f]rom a traditional CIL standpoint focused on state practice, there are grounds for being skeptical about the claim of a customary right to food.”⁶²

The Convention on the Rights of the Child (“CRC”) presents one of the few instances of explicit protection for future generations as that term is being used herein.⁶³ A child is defined in the CRC, Article 1 as “[any] human being below the age of eighteen years” and thus encompasses the near future generation. The CRC binds parties to several obligations that might arguably be asserted to protect those impacted by Global Climate Change, though as with the ICESCR, those rights are qualified by the language of Article 4: “With regard to economic, social and cultural rights, States Parties shall undertake such measures to the maximum extent of their available resources and, where needed, within the

59. ICESCR, *supra* note 58, art. 11.

60. See, e.g., Chris Downes, *Must the Losers of Free Trade Go Hungry? Reconciling WTO Obligations and the Right to Food*, 47 VA. J. INT’L L. 619 (2007).

61. *Id.* at 663.

62. *Id.* at 664.

63. See Weston, *supra* note 7, at 383 (“The meaning of ‘future generations’ ranges from today’s children to unborn persons distant in the future without limitations—so-called ‘remote future persons’ . . .”).

framework of international co-operation.”⁶⁴ Perhaps most interesting among the rights posited in the CRC is that found in Article 24:

1. States Parties recognize the right of the child to the enjoyment of the highest attainable standard of health
2. The State Parties shall pursue full implementation of this right and, in particular, shall take appropriate measures: . . .
 - c. To combat disease and malnutrition, including within the framework of primary health care, through, inter alia, the application of readily available technology and through the provision of adequate nutritious foods and clean drinking-water, taking into consideration the dangers and risks of environmental pollution.⁶⁵

Along with the other subsections of Article 24, this subsection provides broad protections for children’s health. One might argue that given the fact that all States except the United States and Somalia are parties to this Convention, its provisions have become customary international law. However, given the general nature of the obligations set out in the Convention, the large numbers of reservations from its provisions,⁶⁶ and the persistent objections of the United States to the Convention, it will probably be very difficult to establish clear, legally binding norms under international law outside the Convention.

Each of the socio-economic rights listed above in the first paragraph of this section are subject to the same critique and therefore are less well established than the rights asserted in the preceding sections.⁶⁷ What remains is only the possibility of arguing, based upon binding and nonbinding international and regional documents, that one or more of these asserted rights might have the sufficiently developed content and sufficient acceptance in the international community outside treaty law so as to form the basis of a human rights claim relative to harms emanating from climate change.⁶⁸

64. CRC, *supra* note 58, art. 4.

65. *Id.* art. 24.

66. See OHCHR – Committee on the Rights of the Child, <http://www2.ohchr.org/english/bodies/crc/> (for a link to the Declarations and Reservations to the CRC) (last visited Nov. 12, 2009).

67. This is not to suggest that there is not emerging law in other arenas. For a discussion of the Right to Water and its development at the domestic level, see Erik B. Bluemel, *The Implications of Formulating a Human Right to Water*, 31 *ECOLOGY L.Q.* 957 (2004).

68. See generally KISS & SHELTON, *supra* note 9, at 237-41 (examining the widely considered possibility that there is an emerging right to a healthy environment).

III. ASSERTION OF INTERNATIONAL HUMAN RIGHTS NORMS IN U.S. COURTS

In order to bring a claim in the U.S. federal courts, several hurdles must be cleared. Key among these is meeting requirements of federal subject matter jurisdiction, standing to sue and personal jurisdiction. Generally speaking, to demonstrate subject matter jurisdiction, one must comply with Article III, Section 2 of the U.S. Constitution⁶⁹ and must meet the requirements of an implementing federal statute. The two principal statutory grants of subject matter jurisdiction are federal question jurisdiction under 28 U.S.C. § 1331, which requires plaintiff to assert a claim which arises “under the Constitution, laws or treaties of the United States”⁷⁰ and Diversity Jurisdiction under 28 U.S.C § 1332, which requires diversity of citizenship as defined by the statute and an amount in controversy of greater than \$75,000.⁷¹ It is also possible to proceed under a specific grant of federal subject matter jurisdiction such as the Alien Tort Statute⁷² which is considered below. Because the law regarding the general grants of subject matter jurisdiction is relatively underdeveloped in this substantive area (i.e., the bringing of international human rights claims in federal courts), and because what law there is regarding those grants tends to draw upon the jurisprudence developed in the ATS cases, this paper will develop the framework of those ATS cases first and then discuss the general grants.

The procedural hurdles raised above may vary depending upon the nature of the subject matter jurisdiction asserted. In addition, plaintiffs may have to address a set of justiciability concerns (separation of powers issues, political question doctrine, act of state doctrine, and concerns regarding international comity). Finally, courts may consider the *forum*

69. Article III, Section 2 of the United States Constitution provides in relevant part: The judicial Power shall extend to all Cases, in Law and Equity, arising under this Constitution, the Laws of the United States, and Treaties made, or which shall be made, under their Authority;—to all Cases affecting Ambassadors, other public Ministers and Consuls;—to all Cases of admiralty and maritime Jurisdiction;—to Controversies to which the United States shall be a Party;—to Controversies between two or more States;—between a State and Citizens of another State;—between Citizens of different States;—between Citizens of the same State claiming Lands under Grants of different States, and between a State, or the citizens thereof, and foreign States, Citizens or Subjects.

70. 28 U.S.C. § 1331 (2008).

71. *Id.* § 1332.

72. *Id.* § 1350. Note that cases and commentators have over the years used different titles when referring to this statute, so that one might see it variously referred to as the Alien Tort Claims Act (“ATCA”), the Alien Tort Act (“ATA”), as well as the Alien Tort Statute (“ATS”). As the Supreme Court seems to have settled on the last term, so does this article.

non conveniens doctrine. The various immunity doctrines may also come into play to limit the potential defendants in a given suit.

A. Alien Tort Statute

1. A Brief History of the ATS in Federal Courts

Modern use of and the modern debate over the ATS date from the Second Circuit's 1980 decision in *Filártiga v. Peña-Irala*.⁷³ In that decision, the court allowed two Paraguayan plaintiffs to bring an action against a Paraguayan member of the police force because he allegedly tortured their relative to death. The court relied upon the ATS, which provides: "The district courts shall have original jurisdiction of any civil action by an alien for a tort only, committed in violation of the law of nations or a treaty of the United States."⁷⁴

In reversing the District Court's decision,⁷⁵ the Second Circuit Court of Appeals held:

Deliberate torture perpetrated under color of official authority violates universally accepted norms of the international law of human rights, regardless of the nationality of the parties. Thus, whenever an alleged torturer is found and served with process by an alien within our borders, section 1350 provides federal jurisdiction.⁷⁶

In reaching its decision, the court focused on the statutory language regarding the "law of nations," which it equated with customary international law. Citing the Supreme Court's opinion in *The Paquete Habana*,⁷⁷ the court concluded:

Where there is no treaty, and no controlling executive or legislative act or judicial decision, resort must be had to the customs and usages of civilized nations; and as evidence of these, to the works of jurists and commentators, who by years of labor, research and experience have made themselves peculiarly well acquainted with the subjects they treat.⁷⁸

The court proceeded to examine "evidence" of the international norm prohibiting the official use of torture, including the United Nations

73. 630 F.2d 876 (2d Cir. 1980).

74. 28 U.S.C. § 1350 (2008).

75. The District Court had dismissed the action for lack of subject matter jurisdiction, relying on dicta in two prior Second Circuit cases that seemed to exclude a nation's treatment of its own citizens from the definition of "law of nations." *Filártiga*, 630 F.2d at 888.

76. *Id.* at 878.

77. 175 U.S. 677, 700 (1900).

78. *Filártiga*, 630 F.2d at 880-81.

Charter,⁷⁹ the Universal Declaration of Human Rights,⁸⁰ the Declaration on the Protection of All Persons From Being Subject to Torture,⁸¹ the American Convention,⁸² the ICCPR,⁸³ and the European Convention.⁸⁴ From this examination of international law, both binding and nonbinding, the court found the existence of a norm prohibiting the official use of torture.⁸⁵

Over the more than twenty five years since *Filártiga*, the federal courts have allowed an expanding category of private rights of action based on serious violations of customary international law norms including: claims of genocide, war crimes, crimes against humanity, summary execution, arbitrary detention and disappearance.⁸⁶ Standing has not been an issue in these cases, presumably because both those eligible to bring suit (aliens) and the grounds upon which they may do so are spelled out in the statute. However, the cases have struggled with various other procedural and substantive aspects of applying the ATS. When one views a case brought by an alien against an alien or aliens for conduct taking place in a foreign venue (which has been the typical though not the exclusive format of these cases), one obvious issue that arises is that of *forum non conveniens*.⁸⁷ The courts have also addressed concerns surrounding separation of powers, for example, whether the political question doctrine, under which a court may dismiss a case if it finds that the substance of the claim relates to a matter left by the Constitution to the political branches, precludes the exercise of jurisdiction in some or all of these ATS cases.⁸⁸ The courts have also

79. U.N. Charter art. 59.

80. UDHR, *supra* note 11.

81. G.A. Res. 3452, U.N. Doc. A/1034 (Dec. 9, 1975), *available at* <http://daccess-ods.un.org/TMP/6779808.html>.

82. American Convention, *supra* note 11.

83. ICCPR, *supra* note 11.

84. European Convention, *supra* note 11.

85. *Filártiga*, 630 F. 2d at 884.

86. *See, e.g.*, *Kadic v. Karadzic*, 70 F.3d 232 (2d Cir. 1995) (genocide, war crimes, torture, and summary execution); *Forti v. Suarez-Mason*, 672 F. Supp. 1535 (N.D. Cal 1987) (torture, prolonged arbitrary detention, and summary execution); *see also Xuncax v. Gramajo*, 886 F. Supp. 162 (D. Mass. 1995) (summary execution, torture, disappearance, and arbitrary detention).

87. *See, e.g.*, *Wiwa v. Royal Dutch Petroleum*, 226 F.3d 88 (2d Cir. 2000) (*forum non conveniens* is a discretionary doctrine that allows a district court which has good jurisdiction and venue over a case to nonetheless dismiss it, if the court determines there is an alternative forum which is more convenient and more fair to the parties); *see also Piper Aircraft Co. v. Reyno*, 454 U.S. 235 (1981); *Gulf Oil Corp. v. Gilbert*, 330 U.S. 501 (1947).

88. *See, e.g.*, *Tel-Oren v. Libyan Arab Republic*, 726 F.2d 774, 789, 823 (D.C. Cir. 1984) (Bork, J., concurring and Robb, J., concurring) and *infra* notes 149-53 and

considered whether the Act of State Doctrine, “under which courts generally refrain from judging acts of a foreign state within its territory,” precludes application of the ATS in a given case.⁸⁹ The lower courts have generally rejected a broad-based objection to the ATS based upon separation of powers concerns.⁹⁰

A larger concern in the federal courts considering an ATS case has been whether the statute is constitutional and, if so, whether it provides a cause of action as well as federal subject matter jurisdiction. Related to that latter issue is the question of what constitutes a “tort in violation of the law of nations.” Prior to the Supreme Court’s decision in *Sosa v. Alvarez-Machain*,⁹¹ the lower courts had reached a level of consensus on that latter question, agreeing that it is not every act alleged to be in violation of international law that would be sufficient under the ATS. Rather, an “international tort” must involve an act that violates a norm that is “specific, universal and obligatory.”⁹²

2. *Sosa v. Alvarez-Machain and its Aftermath*

The Supreme Court’s decision in *Sosa* should be placed in the context of a then ongoing scholarly debate regarding the relationship between customary international law and federal common law. This debate (and its resolution by the Court in *Sosa*) has relevance not only for ATS cases, but also for other human rights/climate change cases that might be brought in federal court on other subject matter bases.⁹³ Beginning in 1997, a group of legal scholars, led by Curtis Bradley and Jack Goldsmith, attacked what they referred to as the “modern position.” They defined this position as the “proposition that customary international law (‘CIL’) is part of this country’s post-*Erie* federal common law.”⁹⁴ The result of that characterization they argue, is that

accompanying text.

89. *Kadic*, 70 F.3d. at 250; see *infra* notes 156-58 and accompanying text.

90. See, e.g., *Kadic*, 70 F.3d at 249; *Forti*, 672 F. Supp. at 1544; *Siderman de Blake v. Republic of Argentina*, 965 F. 2d 699, 707 (9th Cir. 1992).

91. 542 U.S. 692, 697 (2004).

92. See, e.g., *Forti*, 672 F. Supp. at 1539-40 (finding that such a tort “must be one which is definable, obligatory [rather than horatory], and universally condemned” and applying that test to dismiss two alleged torts under the ATS).

93. For a more complete understanding of the debate and how it is resolved by *Sosa*, see Pamela J. Stephens, *Spinning Sosa: Federal Common Law, The Alien Tort Statute and Judicial Restraint*, 25 B.U. INT’L L.J. 1, 1-2 (2007).

94. Curtis A. Bradley & Jack L. Goldsmith, *Customary International Law as Federal Common Law: A Critique of the Modern Position*, 110 HARV. L. REV. 815, 816 (1997); see also Harold Hongju Koh, *Is International Law Really State Law?*, 111 HARV. L.REV. 1824, 1826 (1998); Gerald Neuman, *Sense and Nonsense About Customary International Law: A Response to Professors Bradley and Goldsmith*, 66 FORDHAM L.

“[i]f CIL has the status of federal common law, it presumably preempts inconsistent state law pursuant to the Supremacy Clause and provides a basis for Article III ‘arising under’ jurisdiction.”⁹⁵ They argue that the “modern position” rests on “questionable assumptions” and is inconsistent with “fundamental constitutional principles” and should therefore be rejected.⁹⁶

Much of the Bradley/Goldsmith critique has played out in the context of cases brought under the ATS. Together with other revisionist scholars, they had made the illegitimacy of using the ATS to bring cases based upon violations of customary international law pivotal to their arguments.⁹⁷ However, the Supreme Court, in addressing the applicability and scope of the ATS in *Sosa*, fully considered the Bradley/Goldsmith position and rejected it in its entirety.⁹⁸

At the heart of the Supreme Court’s decision in *Sosa* is the question of whether the ATS is a purely jurisdictional statute or whether it also creates a federal cause of action. In order to bring a claim in federal court one must satisfy the requirements of a grant of federal subject matter jurisdiction. This is so because under our Constitution⁹⁹ the federal district courts are courts of limited jurisdiction, meaning there is a presumption that they do not have jurisdiction absent an affirmative constitutional and statutory grant. Virtually all who considered the ATS viewed it as at a minimum providing this statutory grant. In addition to a jurisdictional grant, one must also assert a valid claim under federal law. Perhaps the easiest way to illustrate this is with diversity jurisdiction. A case might come before the federal district court in which the plaintiff was of a different citizenship than the defendant and the amount in controversy was greater than \$75,000. That would satisfy the subject matter jurisdiction requirements of § 1332, the diversity jurisdiction statute. But, the plaintiff could not proceed in the absence of a valid

REV. 371, 371-72 (1997); Jordan J. Paust, *Customary International Law and Human Rights Treaties are the Law of the United States*, 20 MICH. J. INT’L L. 301, 301 (1999); Beth Stephens, *The Law of the Land: Customary International Law as Federal Law After Erie*, 66 FORDHAM L. REV. 393, 393-94 (1997).

95. Bradley & Goldsmith, *supra* note 95, at 817.

96. *Id.*

97. See, e.g., Curtis A. Bradley & Jack L. Goldsmith, *The Current Illegitimacy of International Human Rights Litigation*, 66 FORDHAM L. REV. 319, 356 (1997).

98. “By making the self-styled ‘revisionist’ approach to customary international law central to his analysis, and by obtaining the votes of only two additional justices, Justice Scalia effectively demonstrates that the revisionist critique of the ATS was unpersuasive and had finally been laid to rest” Ralph G. Steinhardt, *Laying One Bankrupt Critique to Rest: Sosa v. Alvarez-Machain and the Future of International Human Rights Litigation in U.S. Courts*, 57 VAND. L. REV. 2241, 2254 (2004).

99. U.S. Const. art. III, § 2.

substantive claim or cause of action. In a diversity case this would generally be a state law claim (e.g. breach of contract, negligence, etc.). With regard to the ATS, the question was what law created the underlying cause of action, the tort at issue. Some argued that it could not be international law in that international law does not generally create private rights of action.¹⁰⁰

This question, in turn, depends upon the broader question of the relationship between customary international law and federal common law.¹⁰¹ The revisionist position was that once *Erie* established that there was no “general federal common law,” customary international law (which pre-*Erie* was part of the general common law) could no longer be applied as law in the federal courts “in the absence of some domestic authorization to do so, as it was under the regime of general common law.”¹⁰² In their initial article setting out this position, Bradley and Goldsmith left open the possibility that ATS claims might survive their critique, saying that “rejection of the modern position would not necessarily spell the end for *Filartiga*-type litigation for two reasons. First, there might be justifications other than the modern position for the constitutionality of the ATS. And, second, Congress could legislate human rights norms into federal law, which would remedy any Article III problems.”¹⁰³ However, their subsequent articles were more hostile to ATS suits,¹⁰⁴ focusing on the fact that the claims in these cases rested upon multilateral treaties, which the Senate had expressly made nonself-executing in the U.S. Courts and nonbinding UN General Assembly resolutions. “The modern position claim that CIL is to be applied as federal common law thus ‘compensate[s] for the abstinence of the United States vis-a-vis ratification of international human rights treaties.’ It permits federal courts to accomplish through the back door of CIL what the political branches have prohibited through the front door of treaties.”¹⁰⁵ Other international scholars responded to the Bradley/Goldsmith critique swiftly and negatively.¹⁰⁶

100. *Tel-Oren*, 726 F.2d at 817 (Bork, J., concurring).

101. See Pamela Stephens, *supra* note 94 at 7-14, for a more complete analysis of the “traditional” view and of post-*Erie* federal common law versus the revisionist critique.

102. Bradley & Goldsmith, *supra* note 95, at 853.

103. *Id.* at 872-73; see, e.g., The Torture Victim Protection Act, 28 U.S.C. § 1350 (2008).

104. See, e.g., Bradley & Goldsmith, *supra* note 98, at 320; Curtis Bradley, *The Costs of International Human Rights Litigation*, 2 CHI. J. INT'L L. 457, 457-58 (2001); Curtis Bradley, *The Alien Tort Statute and Article III*, 42 VA J. INT'L L. 587, 591 (2002).

105. Bradley & Goldsmith, *supra* note 98, at 330-31.

106. See, e.g., Koh, *supra* note 95, at 1827; Ryan Goodman & Derek Jenks, *Filartiga's Firm Footing: International Human Rights and Federal common Law*, 66

*Sosa v. Alvarez-Machain*¹⁰⁷ was a lawsuit brought by a Mexican doctor, who alleged he had been kidnapped in Mexico by persons (including the defendant Sosa) who were working with the U.S. Drug Enforcement Agency and was brought to the United States against his will. He sued the U.S. government under the Federal Tort Claims Act (“FTCA”) and Sosa under the ATS.¹⁰⁸ The district court had granted the government’s motion to dismiss on the FTCA claim, but had granted a summary judgment for the plaintiff on the ATS claim. The Ninth Circuit, both originally and en banc, affirmed on the ATS claim, but reversed the dismissal of the FTCA claim.¹⁰⁹

The Court’s majority addressed the threshold issue of whether the ATS was merely a grant of subject matter jurisdiction or in addition was meant to create a cause of action. The original language of the ATS in the First Judiciary Act of 1789 provided that federal courts “shall also have cognizance, concurrent with the courts of the several States, or the circuit courts, as the case may be, of all causes where an alien sues for a tort only in violation of the law of nations or a treaty of the United States.”¹¹⁰ The Court focused on both the language of the statute and its placement in § 9 of the Judiciary Act. It observed that “the ATS gave the district courts ‘cognizance’ of certain causes of action, and the term bespoke a grant of jurisdiction, not power to mold substantive law”¹¹¹ and “the fact that the ATS was placed in § 9 of the Judiciary Act, a statute otherwise exclusively concerned with federal court jurisdiction, is itself support for its strictly jurisdictional nature.”¹¹² Therefore, the court held that “the statute was intended as jurisdictional in the sense of addressing the power of the courts to entertain cases concerned with a certain subject.”¹¹³

However, the Court went on to reject the notion that the ATS was “stillborn” because Congress did not subsequently pass statutes creating causes of actions that implemented the statute. Instead, the Court decided

FORDHAM L. REV. 463, 471 (1997); Neuman, *supra* note 95, at 371; Beth Stephens, *supra* note 95, at 396-97. For a detailed discussion of this response, see Pamela Stephens, *supra* note 94, at 12-14.

107. *Sosa v. Alvarez-Machain*, 542 U.S. 692, 698 (2004).

108. *Id.* at 697-99.

109. *Alvarez-Machain v. U.S.*, 331 F. 3d 604, 641 (9th Cir. 2003). The FTCA claim was rejected by the Supreme Court as falling within an exception to the FTCA waiver of sovereign immunity for claims “arising in a foreign country.” 28 U.S.C. § 2680(k) (2008). For the full discussion of the Court’s rationale see *Sosa*, 542 U.S. at 699-712.

110. Act of Sept. 24, ch. 20, § 9(b), 1 Stat. § 79 (1789).

111. *Sosa*, 542 U.S. at 713 (citing Alexander Hamilton’s discussion of jurisdiction in THE FEDERALIST NOS. 81, 447, 451).

112. *Id.*

113. *Id.* at 714.

that "Congress intended the ATS to furnish jurisdiction for a relatively modest set of actions alleging violations of the law of nations. Uppermost in the legislative mind appears to have been offenses against ambassadors . . . violations of safe conduct . . . and individual actions arising out of prize captures and piracy."¹¹⁴ All members of the Court joined this portion of the opinion.

A majority (consisting of Justice Souter writing for himself and five other members of the Court) went further, however, and found that while the First Congress may only have had in mind those three offenses, the ATS allows federal courts to recognize other private causes of action in violation of the law of nations.¹¹⁵ The Court limited this by saying that the federal courts should "require any claim based on the present day law of nations to rest on a norm of international character accepted by the civilized world and defined with a specificity comparable to the features of the eighteenth century paradigms we have recognized."¹¹⁶ The Court did argue for judicial caution in recognizing new causes of action.¹¹⁷ In light of its expressed concerns, the Court adopted a test for the recognition of new private causes of action under the ATS that would "not recognize private claims . . . with less definite content and acceptance among civilized nations than the historical paradigms familiar when § 1350 was enacted."¹¹⁸ In other words, the Court requires acts "which violate[] definable, universal and obligatory norms,"¹¹⁹ or violations of a norm that is "specific, universal and obligatory."¹²⁰ The Court held on the specific facts of the case before it that Alvarez-Machain had failed to demonstrate that his brief detention violated any such international norm.¹²¹

114. *Id.* at 720.

115. *Id.* at 725.

116. *Id.*

117. The Court sets out five specific reasons for the exercise of such caution: (1) the prevailing view of the common law has changed since 1789; (2) in addition, there has been a change in the role of the federal courts in making common law; (3) the Court reaffirms its view that the creation of private rights is more properly a legislative function; (4) the Court acknowledges that there are "collateral consequences of making international rules privately actionable"; and (5) the Court notes a lack of congressional mandate to seek out and define new violations of the law of nations. *Sosa*, 542 U.S. at 725-28. In fact, "the Senate has expressly declined to give federal courts the task of interpreting and applying international human rights law, as when its ratification of the International Covenant on Civil and Political Rights declared that the substantive provisions were not self-executing." *Id.* at 728.

118. *Id.* at 732.

119. *Id.* (citing *Tel-Oren*, 726 F.2d at 781 (Edwards, J., concurring)).

120. *Sosa*, 542 U.S. at 732 (citing *In re Estate of Marcos Human Rights Litig.*, 25 F.3d 1467, 1475 (9th Cir. 1994)).

121. *Id.* at 738.

In the immediate aftermath of *Sosa*, a number of things relevant to our topic seem clear. First, the federal courts continue to apply the “specific, universal and obligatory” norm standard much as they did before *Sosa* to find the existence of both subject matter jurisdiction and a private right of action.¹²² There have been a few cases that did not allow an ATS claim to go forward.¹²³ *Sosa* does not seem to have impacted the decisions in these cases, although it is cited extensively in these and in the cases which found good causes of action. For the most part it seems these cases would have turned out the same way pre-*Sosa*, turning as most do on the plaintiffs’ failure to establish a definite, obligatory norm of customary international law.¹²⁴ The possible exception is the *Enahoro* case, which relies heavily on the language of the *Sosa* case to conclude that the Torture Victim Protection Act (“TVPA”)¹²⁵ completely supplants the ATS with regard to claims for torture and extrajudicial killing. This means, according to the *Enahoro* Court, that “these claims

122. See, e.g., *Sarei v. Rio Tinto, PLC*, 487 F.3d 1193 (9th Cir. 2007); *Aldana v. Del Monte*, 416 F.3d 1242 (11th Cir. 2005); *Arce v. Garcia*, 400 F.3d 1340 (11th Cir. 2005); *Presbyterian Church of Sudan v. Talisman Energy, Inc.*, No. 01 Civ. 9882 (DLC), 2005 WL 2082846 (S.D.N.Y. Aug. 30, 2005); *Chavez v. Carranza*, 413 F. Supp. 2d 891 (W.D. Tenn. 2005); *Doe v. Saravia*, 348 F. Supp. 2d 1112 (E.D. Cal. 2004); *Mujica v. Occidental Petroleum*, 381 F. Supp. 2d 1164 (C.D. Cal. 2005); *JAMA v. U.S. Immigration & Naturalization Serv.*, 343 F. Supp. 2d 338 (D. NJ 2004).

123. See, e.g., *Enahoro v. Abubakar*, 408 F.3d 877 (7th Cir. 2005); *Hwang Geum Joo v. Japan*, 413 F.3d 45 (D.C. Cir. 2005); *Weiss v. The Am. Jewish Comm.*, 335 F. Supp. 2d 469 (S.D.N.Y. 2004); *Arndt v. UBS AG*, 342 F. Supp. 2d 132 (E.D.N.Y. 2004); *In re S. African Apartheid Litig.*, 346 F. Supp. 2d 538 (S.D.N.Y. 2004).

124. See, e.g., *Weiss*, 335 F. Supp. 2d at 476-77 (in which the court found that the plaintiffs failed to plead a tort in violation of customary international law in seeking to prevent the building of a memorial in a former death camp, which might have itself desecrated the site); *Arndt*, 342 F. Supp. 2d at 139 (German “plaintiffs do not identify any principle of international law that they rely on” in an attempt to sue German corporations, which allegedly profited under the Nazi regime); *In re S. African Apartheid Litig.*, 346 F. Supp. 2d at 548 (finding “that none of the theories pleaded by plaintiffs support jurisdiction under the ATCA” in their attempt to sue corporations which had done business with the former government).

125. The TVPA was enacted by Congress as implementing legislation under the Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, which was ratified by the United States in October of 1990. “The Act provides a federal cause of action for damages ‘against any individual who, under actual or apparent authority or under color of law of any foreign nations, subjects any individual to torture or extrajudicial killing.’ The Act requires the claimants to have exhausted remedies ‘in the place in which the conduct giving rise to the claim occurred’ prior to bringing the federal suit and it contains a ten-year statute of limitations. It provides definitions of extrajudicial killings and torture based upon the Torture Convention.” Pamela J. Stephens, *Beyond Torture: Enforcing International Human Rights in Federal Courts*, 51 SYRACUSE L. REV. 941, 953 (2001) (quoting Torture Victim Protection Act of 1991, Pub. L. No. 102-256, 106 Stat. 73 (1992)).

may only be brought under the TVPA and are subject to its limitations regarding exhaustion and the statute of limitations, as well as the definitions of the substantive claims provided by the TVPA.”¹²⁶ No case has rejected a prior, clearly established norm creating a cause of action.¹²⁷

A second observation regarding the post-*Sosa* caselaw is that no new causes of action have been recognized. The language of caution and judicial restraint in *Sosa* appears in several subsequent cases, suggesting that a certain “chilling effect” may operate with respect to the creation of new norms.¹²⁸ This obviously impacts our task, since cases prior to *Sosa* rejected not only causes of action based upon international environmental norms, but also those based upon human rights norms of lesser specificity and lacking “universal” acceptance. Thus far the few cases since *Sosa* have continued to do so. If in fact the federal courts are taking a more jaundiced view of new causes of action, placing a greater emphasis on how clear, definite and universally accepted the international norms are, this will make our task even more difficult.

B. New Causes of Action Based on the Impacts of Climate Change in the Federal Courts: Substantive and Procedural Hurdles.

1. Subject Matter Jurisdiction and Failure to State a Claim Under the ATS

The limitations imposed by subject matter jurisdiction and failure to state a claim under the ATS will be considered jointly, since courts tend to treat them either as one inquiry or two interrelated inquiries. As of now, none of the norms discussed in the first part of this paper, as those norms relate to environmental claims generally or claims based upon global climate change specifically, have been accepted by the U.S. federal courts. In fact, in cases prior to *Sosa*, courts expressly rejected such environmentally-based claims under the ATS, whether raised under

126. Pamela Stephens, *supra* note 94, at 34-35. See *Enahoro*, 408 F.3d at 884-85; *cf. Aldana*, 416 F. 3d 1242; *Doe*, 348 F. Supp. 1112; *Chavez*, 413 F. Supp. 2d 891; *Mujica*, 381 F. Supp. 2d 1164 (all of which rejected that view and found subject matter jurisdiction and private rights of action for torture or extrajudicial killing or both under the ATS).

127. A couple of cases rejected application of what might be valid norms based upon the specific facts of the case (much like *Sosa*). See, e.g., *Aldana*, 416 F.3d at 1246-47.

128. See, e.g. *Aldana*, 416 F.3d at 1246-47 (“But the Court said the federal courts should exercise ‘great caution’ when considering new causes of action and maintain ‘vigilant doorkeeping’ . . . thus opening the door to a narrow class of international norms [recognized] today.”).

international environmental law norms¹²⁹ or under human rights norms.¹³⁰ In a very careful and detailed opinion, the Second Circuit in *Flores v. Southern Peru Copper Corp.* directly addressed the question of whether plaintiffs could bring ATS claims based upon allegations that the defendant mining company's Peruvian operations had caused severe lung disease. Interestingly, the court seems in its analysis to equate the subject matter jurisdiction inquiry under the ATS with the traditional determination of whether a customary international law norm has emerged. After examining the existing customary international law, the court held that the plaintiffs had failed to establish that the mining company violated specific universal and obligatory norms. Plaintiffs alleged that their rights to life and health had been violated by the defendant's actions, but the court held that "the asserted 'right to health' and 'right to life' are insufficiently definite to constitute rules of customary international law."¹³¹ The court examined nonbinding international law and binding law to which the United States is not a party and held that "[f]ar from being 'clear and unambiguous,' the statements relied on by plaintiffs to define the rights to life and health are vague and amorphous."¹³² According to the court, the principles relied upon by the plaintiffs are

boundless and indeterminate. They express virtuous goals understandably expressed at a level of abstraction needed to secure the adherence of states that disagree on many of the particulars regarding how actually to achieve them [T]hey do not meet the requirement of our law that rules of customary international law be clear, definite, and unambiguous.¹³³

129. *See, e.g.*, *Beanal v. Freeport-McMoran, Inc.*, 197 F.3d 161 (5th Cir. 1999).

130. *See, e.g.*, *Flores v. Southern Peru Copper Corp.*, 343 F.3d 140 (2d Cir. 2003).

131. *Id.* at 160.

132. *Id.* at 160-61. The court went on to state: "For example, the statements that plaintiffs rely on to define the rights to life and health include the following: 'Everyone has the right to a standard of living adequate for the health and well-being of himself and his family . . .' UDHR, Art. 25, G.A. Res 217A(III), U.N. GAOR, 3d Sess., U.N. Doc. A/810 at 71 (1949); 'The States Parties to the present Covenant recognize the right of everyone to the enjoyment of the highest attainable standard of physical and mental health.' International Covenant on Economic, Social and Cultural Rights, Art. 12; 'Human beings are . . . entitled to a healthy and productive life in harmony with nature.' Rio Declaration on Environment and Development, Rio de Janeiro, Brazil, June 13, 1992, Principle 1, 31 I.L.M. 874."

133. *Id.* at 161. The court also rejected plaintiffs' purely environmental claims because they failed to establish that CIL prohibits intranational pollution. *See Flores*, 343 F.3d at 161-68.

Sosa indicated that only when such a clear and universal norm is established should a court go on to consider “even the possibility of a private right of action.”¹³⁴

Following *Sosa*, the Ninth Circuit, after rehearing, issued a second opinion in *Sarei v. Rio Tinto, PLC*.¹³⁵ Like *Flores*, this case was on appeal from the district court’s dismissal of plaintiffs’ claims brought under the ATS. The claims were filed against a mining company by citizens of Bougainville, an island in Papua New Guinea (“PNG”), and arose out of that company’s mining operations and a ten-year civil conflict that followed an uprising at the Rio Tinto mine. The district court found that “the plaintiffs had stated cognizable ATCA claims for racial discrimination, crimes against humanity, and violations of the laws of war, but that of the environmental claims asserted, only the violation of the United Nations Convention on the Law of the Sea (“UNCLOS”) was cognizable under the ATCA.”¹³⁶ The district court, however, dismissed all of the plaintiffs’ claims as presenting nonjusticiable political questions and alternatively dismissed the racial discrimination claims under the act of state doctrine.¹³⁷

Although the Ninth Circuit went on to reverse the district court on almost all issues, it did so largely based on its view of the above-cited justiciability issues and did not take the opportunity to address directly the environmental claims raised here. Even the UNCLOS claim was not addressed on its merits. The court discussed *Sosa* and that case’s relevance and concluded that the Supreme Court essentially adopted the test of the Ninth Circuit’s prior case law.¹³⁸ The Ninth Circuit adopts a fairly liberal view regarding the burden the plaintiffs must meet in order to withstand a motion to dismiss for lack of subject matter jurisdiction:

In order to satisfy ourselves of jurisdiction, we thus need not engage in a full blown review of plaintiffs’ claims on the merits, but rather must determine only whether the claims do not “appear[] to be immaterial and made solely for the purpose of obtaining jurisdiction,” and are not “wholly insubstantial and frivolous” Whether the cause of action turns out to be ‘well-founded in law and fact’ . . . is beyond the scope of our threshold jurisdictional review.¹³⁹

134. *Sosa*, 542 U.S. at 738, n. 30.

135. *Sarei*, 487 F.3d 1193.

136. *Id.* at 1199.

137. *See infra* notes 157-165 and accompanying text for discussion of these doctrines.

138. *Sarei*, 487 F.3d at 1202 (noting that the Supreme Court “adopted a view of ATCA jurisdiction that is ‘generally consistent’ with the Ninth Circuit law applied by the district court in this case . . .”).

139. *Id.* at 1201.

It appears at this point that U.S. federal courts are unlikely to find a sufficiently definite, universal, and obligatory norm that will satisfy the ATS and thereby serve our purpose of using international human rights law to bring a lawsuit in federal court. Note that the cases to date have been against corporations, so issues regarding government liability for failure to meet obligations under customary international law have not been tested, but do not necessarily seem to provide a more promising basis for litigation. This is so not only because the same issues of indefiniteness and lack of universal acceptance of norms will persist, but also because of immunity defenses, both domestic and foreign.¹⁴⁰

2. Other Bases for Federal Subject Matter Jurisdiction

The discussion above relates only to cases brought by aliens in U.S. courts. In order for U.S. citizens to use the federal courts to bring climate change litigation based upon human rights norms, other bases of subject matter jurisdiction must be asserted. As discussed earlier, there are other possible bases for federal subject matter jurisdiction: federal question jurisdiction,¹⁴¹ diversity jurisdiction,¹⁴² and federal supplemental jurisdiction.¹⁴³ The issue of whether international human rights claims could be asserted under the general federal question jurisdiction was raised in *Sosa*. Once the Court found that customary international law was a part of federal common law and formed the basis of a private right of action under the ATS, the issue then became whether a similar cause

140. *See, e.g.*, *Argentine Republic v. Amerada Hess Shipping Corp.*, 488 U.S. 428 (1989) (holding that the Foreign Sovereign Immunity Act provides the sole basis for obtaining jurisdiction over a foreign state in U.S. courts and that the Alien Tort Statute did not provide a human rights exception to allow jurisdiction.) However, the most important exception to foreign sovereign immunity is the commercial activity exception. This exception states that a suit may be brought against a foreign state in three circumstances: the suit must be “based upon a commercial activity carried on in the United States by the foreign state,” based upon “an act performed in the United States in connection with a commercial activity of the foreign state elsewhere,” or based upon “an act outside the territory of the United States in connection with a commercial activity of the foreign state elsewhere and that act causes a direct effect in the United States.” 28 U.S.C. § 1605(a)(2) (2008). One can imagine a situation in which a foreign state might meet one of these standards through state owned utilities or industries that contributed to Global Climate Change.

141. 28 U.S.C. § 1331.

142. *Id.* § 1332.

143. *Id.* § 1367. Supplemental jurisdiction allows claims which could not get into federal court on their own (i.e., no federal question or diversity jurisdiction), to “piggy back” onto a federally sufficient claim to which it is related. The statute provides the standard for relatedness, that the two claims must form “one constitutional case” and limits significantly the extent to which supplemental jurisdiction is available in a diversity jurisdiction case.

of action might be implied under the general federal question jurisdiction statute. In his concurring opinion, Justice Scalia argues that the position taken by the majority “necessarily means that [a claim based on] a post-*Erie* federal common law rule would ‘arise under’ the laws of the United States for purposes of general federal question jurisdiction (essentially rendering moot § 1350).”¹⁴⁴ However, the Court dismisses Scalia’s conclusion:

Our position does not, as Justice Scalia suggests, imply that every grant of jurisdiction to a federal court carries with it an opportunity to develop common law (so that the grant of federal-question jurisdiction would be equally as good for our purposes as § 1350) . . . Section 1350 was enacted on the congressional understanding that courts would exercise jurisdiction by entertaining some common law claims derived from the law of nations; and we know of no reason to think that federal-question jurisdiction was extended subject to any comparable congressional assumption.¹⁴⁵

However, the Ninth Circuit reads *Sosa* as requiring the same jurisdictional showing under § 1331 as under § 1350. “Making the jurisdictional showing under § 1350 the same as under § 1331 is also consistent with *Sosa v. Alvarez-Machain*, . . . which suggests that where a federal court has recognized an international law tort under the ATCA, the suit arises under federal common law and thus federal jurisdiction may alternatively be premised upon § 1331.”¹⁴⁶

The dilemma for “arising under” jurisdiction under § 1331, as well as for potential claims under the diversity jurisdiction statute,¹⁴⁷ is that each of those grants of jurisdiction requires the plaintiffs to establish a cause of action under customary international law, thus creating the same problems that alien plaintiffs face with the ATS. Because international law does not generally provide for private rights of action, it is necessary to imply such rights from customary international law. There is no reason to suppose this would be an easier task under these jurisdictional grants than under the ATS. This is also true regarding supplemental jurisdiction claims under 28 U.S.C. § 1367. That statute allows a claim over which the federal courts would otherwise not have original jurisdiction to be

144. See Pamela Stephens, *supra* note 94, at 20 (citing *Sosa*, 542 U.S. at 745, n. *).

145. *Sosa*, 542 U.S. at 731, n.19.

146. *Id.* at 732. See also *Illinois v. City of Milwaukee*, 406 U.S. 91, 99 (1972) (concluding that “§ 1331 will support claims founded upon federal common law”). Note that this is the theory the plaintiffs argue supports federal subject matter jurisdiction in the case of *Native Vill. of Kivalina v. ExxonMobil*, No. CV 08-1138 (N.D. Cal., filed Feb. 26, 2008).

147. Diversity jurisdiction would theoretically be available in suits involving U.S. citizens suing foreign corporations or foreign officials for claims based upon the harms inflicted by global climate change.

heard in federal court if brought with a related claim over which the federal courts do have jurisdiction.¹⁴⁸ Though this doctrine is generally asserted to allow state law claims into federal court, the court in *Rio Tinto* stated that “because plaintiffs are plainly aliens whose claims sound exclusively in tort, we need only inquire into whether they have alleged at least one nonfrivolous violation of the law of nations. If they have, the district court may exercise supplemental jurisdiction over the remaining claims in the complaint.”¹⁴⁹ Presumably the court means this to extend to the environmental claims dismissed by the district court. However, for the reasons discussed above, once that court has asserted proper subject matter jurisdiction via § 1367, any environmental claims or human rights claims based upon environmental harms would likely be dismissed for failure to state a claim upon which relief would be granted.¹⁵⁰

3. Standing

Standing doctrine developed as an attempt to analogize actions against governmental agencies or entities to those against private parties, and early cases, therefore, focused on confining the actionable cases to those in which the injury involved was analogous to an injury recognized under the common law.¹⁵¹ That earlier characterization has evolved and more recently, the Supreme Court has described its jurisprudence in the area as follows:

Over the years, our cases have established that the irreducible constitutional minimum of standing contains three elements: First, the plaintiff must have suffered an “injury in fact”—an invasion of a legally-protected interest which is (a)concrete and particularized [by

148. The test for relatedness is whether the claims form one constitutional case, which is ascertained by whether they share a common nucleus of operative fact. *See United Mine Workers of Am. v. Gibbs*, 383 U.S. 715 (1966).

149. *Sarei*, 487 F.3d at 1201.

150. An additional jurisdictional requirement for bringing a case in federal court is the requirement that the defendant in the case be subject to personal jurisdiction, that is, the court must have the power to adjudicate with respect to the rights and obligations of such a party. In most of the ATS cases, personal jurisdiction has not been an issue. With respect to individual defendants, personal jurisdiction has generally been asserted by in-hand service of process within the United States. *See, e.g., Kadic*, 70 F.3d 232. With respect to corporate defendants, the court has been required to determine whether the corporation has sufficient minimum contacts with the U.S. to support personal jurisdiction. This may be satisfied by a high quantity and quality of defendant’s business activity in the United States or by U.S. corporate citizenship. *See, e.g., Wiwa v. Royal Dutch Petroleum*, 226 F.3d 88 (2d Cir. 2000).

151. *See generally* HOWARD P. FINK, ET AL., *FEDERAL COURTS IN THE 21ST CENTURY: CASES AND MATERIALS* (3d ed. 2007).

particularized, we mean that the injury must affect the plaintiff in a personal and individual way] and (b) “actual or imminent, not ‘conjectural’ or ‘hypothetical’.” Second, there must be a causal connection between the injury and the conduct complained of—the injury has to be “fairly . . . traceable to the challenged action of the defendant, and not . . . the result [of] the independent action of some third party not before the court.” Third, it must be “likely,” as opposed to merely “speculative,” that the injury will be “redressed by a favorable decision.”¹⁵²

The party asserting standing bears the burden of establishing these elements.

The issues in the preceding sections are likely to sink global climate change litigation brought under a theory of human rights and, therefore, standing will not be much of an issue. In the existing case law regarding the ATS, standing issues have seldom been invoked because the statute, by its nature, requires proof of an injury (tort) based upon the law of nations and suffered by an alien. Absent any one of those elements and the case fails for lack of subject matter jurisdiction. With those elements present, given the limited category of rights to which the statute has been applied, the plaintiff has a good argument for standing—injury in fact (that is concrete and particularized), that is both traceable to the actions of the defendant and redressable by a favorable decision.¹⁵³ However, standing will become more of an issue as plaintiffs attempt to depart from this traditional model for ATS claims. Moving to a model which claims that defendants, including governmental agencies, are liable for broader, less definite injuries implicates all three aspects of standing because such injuries (1) are typically less traceable to the defendant’s specific actions (i.e. are less particularized), (2) have less clear causation, and (3) present more difficult problems regarding redressability.¹⁵⁴

Additionally, the same difficulties concerning making claims on behalf of future generations that arise with regard to the other theories would also arise regarding claims based upon international human rights norms, although, as is currently the case with other ATS cases, it is more likely that courts will dismiss these cases based on lack of subject matter jurisdiction before having to address standing.

152. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-561 (1992).

153. *See, e.g., Steel Co. v. Citizens for a Better Env't*, 523 U.S. 83 (1998); *Friends of the Earth, Inc. v. Laidlaw Envtl. Serv. (TOC), Inc.*, 528 U.S. 167 (2000).

154. *See Bradford C. Mank, Standing and Global Warming: Is Injury to All Injury to None?*, 35 ENVTL L. 1 (2005).

4. *Justiciability*

The federal courts have addressed several discretionary doctrines, which allow them to dismiss ATS cases. Assuming that a case asserting injury based on human rights impacts of global climate change is found to meet subject matter jurisdiction and standing requirements, the court might still dismiss it on the basis of the political question, act of state, or international comity doctrines.¹⁵⁵ As the court in *Rio Tinto* acknowledged, “all in effect provide different ways of asking one central question: are the United States courts the appropriate forum for resolving the plaintiffs’ claims?”¹⁵⁶

a. The Political Question Doctrine

The political question doctrine requires courts to consider the analysis of the Supreme Court in *Baker v. Carr*,¹⁵⁷ which seeks to balance separation of powers concerns. The Court in *Baker* sets out six factors, each of which requires dismissal if “inextricable from the case at bar.”¹⁵⁸

It is apparent that several formulations which vary slightly according to the settings in which the questions arise may describe a political question, although each has one or more elements which identify it as essentially a function of the separation of powers. Prominent on the surface of any case held to involve a political question is found a textually demonstrable constitutional commitment of the issue to a coordinate political department; or a lack of judicially discoverable and manageable standards for resolving it; or the impossibility of deciding without an initial policy determination of a kind clearly for nonjudicial discretion; or the impossibility of a court’s undertaking independent resolution without expressing lack of the respect due coordinate branches of government; or an unusual need for unquestioning adherence to a political decision already made; or the potentiality of embarrassment from multifarious pronouncements by various departments on one question.¹⁵⁹

In *Sosa*, by virtue of reaching the merits of the case, the Supreme Court rejects the notion that ATS cases generally run afoul of the political question doctrine. *Sosa* does, however, raise the possibility that a “policy of case-specific deference to the political branches might limit

155. Under which a federal court may decline to exercise jurisdiction over a case or to apply U.S. law to a case in which a foreign state has a greater interest. *See, e.g.*, RESTATEMENT (THIRD), FOREIGN RELATIONS LAW OF THE UNITED STATES, § 403(2) (1987).

156. *Sarei*, 487 F.3d at 1197.

157. 369 U.S. 186 (1962).

158. *Id.* at 217.

159. *Id.*

the availability of relief in the federal courts for violations of customary international law.”¹⁶⁰ The Supreme Court has elsewhere made it clear that not every question that conflicts with a political branch requires dismissal under this doctrine.¹⁶¹

b. Act of State Doctrine

Under the act of state doctrine, federal “courts generally refrain from judging acts of a foreign state within its territory.”¹⁶² The doctrine has seldom been argued and has not generally been applied in ATS cases. The act of state doctrine is also based upon considerations of separation of powers and requires that the court be considering the validity of the governmental act.¹⁶³ In ATS cases, because of the generally egregious nature of the acts alleged (frequently violations of *jus cogens* norms), defendants have seldom argued their behavior was an official act of the state, nor are they likely to find the courts receptive to such an argument.¹⁶⁴ However, as attempts are made to challenge less clearly defined and generally condemned acts of a state, this could become more of an issue.

c. International Comity Doctrine

“Under the international comity doctrine, courts sometimes defer to the laws or interests of a foreign country and decline to exercise jurisdiction that is otherwise properly asserted.”¹⁶⁵ In the *Rio Tinto* case, the district court found two of the claims asserted, claims based upon racial discrimination and UNCLOS, to be cognizable ATS claims, but

160. *Sosa*, 542 U.S. at 733 n.21.

161. Pamela Stephens, *supra* note 126, at 965 n.201.

162. *See Underhill v. Hernandez*, 168 U.S. 250, 252 (1897) (“Every sovereign state is bound to respect the independence of every other sovereign state, and the courts of one country will not sit in judgment on the acts of the government of another, done within its own territory. Redress of grievances by reason of such acts must be obtained through the means open to be availed of by sovereign powers as between themselves.”).

163. *Banco Nacional de Cuba v. Sabbatino*, 376 U.S. 398, 423 (1964) (“The act of state doctrine does, however, have ‘constitutional’ underpinnings. It arises out of the basic relationships between branches of government in a system of separation of powers. It concerns the competency of dissimilar institutions to make and implement particular kinds of decisions in the area of international relations. The doctrine as formulated in past decisions expresses the strong sense of the Judicial Branch that its engagement in the task of passing on the validity of foreign acts of state may hinder rather than further this country’s pursuit of goals both for itself and for the community of nations as a whole in the international sphere.”).

164. *Kadic*, 70 F.3d at 250.

165. *Sarei*, 487 F.3d at 1211 (citing *Societe Nationale Industrielle Aerospatiale v. U.S. Dist. Ct. for the S. Dist. of Iowa*, 482 U.S. 522, 544 n.27 (1987)) (“Comity refers to the spirit of cooperation in which a domestic tribunal approaches the resolution of cases touching the laws and interest of other states.”).

dismissed them under the act of state and international comity doctrines.¹⁶⁶ The decision to do so was largely based on a Statement of Interest (“SOI”) filed by the U.S. State Department.¹⁶⁷ The Ninth Circuit approved of the district court’s reliance on comity to dismiss the case, but concluded that the district court had given too much weight to that SOI and thus remanded for reconsideration of those claims.¹⁶⁸

In conclusion, at this point international environmental cases based on human rights violations, including ATS cases, stand very little chance of success absent clearer customary law in the area. A search of state law cases has found very few relevant cases in which international human rights norms are asserted. There is at least one environmental case asserting claims based on international norms.¹⁶⁹ One of the major obstacles to bringing such cases in state courts against foreign defendants is that they will invariably be removed, when possible, to federal court.¹⁷⁰

IV. AN ALTERNATIVE INTERNATIONAL FORUM

Two potential alternative forums for raising these issues are the IACHR and the Inter-American Court of Human Rights. As noted earlier in this paper, the Inter-American Human Rights system has been receptive to arguments seeking broad protections for rights to life, health and property, particularly regarding indigenous peoples under both the binding American Convention and the nonbinding American Declaration of the Rights and Duties of Man. Moreover, the Inter-American Court of Human Rights has used language suggesting that the protection of future generations is a viable goal.¹⁷¹ However, three factors caution against

166. *See id.* at 1199.

167. The SOI stated that in the opinion of the State Department, “continued adjudication of the claims . . . would risk a potentially serious adverse impact on the peace process [in Papua New Guinea], and hence on the conduct of our foreign relations.” It concludes with the observation that “[t]he Government of Papua New Guinea . . . has stated its objection to these proceedings in the strongest terms,” and that PNG “perceives the potential impact of this litigation on the U.S.-PNG relations, and wider regional interests, to be ‘very grave.’” *Id.* at 1205-06.

168. *Id.* at 1213 (“The district court acted within its discretion in determining that it should decline to hear these claims on comity grounds. However, as with the district court’s act of state dismissal of the UNCLOS claim, because we have rejected the district court’s reliance on the SOI in the context to the political question doctrine, we again consider it prudent to allow the district court to revisit its reliance on the SOI in the comity context”).

169. *See Alomang v. Freeport-McMoran, Inc.*, 718 So. 2d 971 (La. Ct. App. 1998).

170. *See* 28 U.S.C. § 1441 (2008).

171. *See, e.g.*, *The Case of Bámaca-Velásquez*, *supra* note 2.

relying fully on the Inter-American system at this time. First, the failure of the United States and Canada to fully participate in the Organization of American States ("OAS"), including their failure to ratify the American Convention and thereby accept the jurisdiction of the Inter-American Court of Human Rights, weakens the system and leaves it without any effective remedy against either country. Second, states have not complied with the broad decisions in the environmental area and the court has no power to enforce its judgments.¹⁷² And finally, the system's reluctance to take the Inuit case is troubling in that it seems to suggest that the Commission is unlikely to take on the United States or, alternatively, that even with its relatively broad view of the right asserted, it does not believe the petitioners can adequately establish a connection between the acts of the United States and the harms to the Inuit way of life.

As far as other international forums are concerned, there are none available for proceeding against nonstate actors, and the United States has insulated itself from such actions in the ICCPR Human Rights Committee by refusing to become a party to Optional Protocol 1, which provides for individual petitions. It is true that the United States has accepted the possibility of state-to-state petitions under the ICCPR, but this is as of yet an unused option. Finally, the United States is not a party to other international treaties that might obligate it at least to report to the associated treaty bodies.

V. CONCLUSION

While there are many international human rights norms that seem not only relevant, but also legally applicable to addressing the harms caused by global climate change, many difficulties remain in turning a "moral imperative into a legal imperative."¹⁷³ The emerging law linking human rights and climate change must be developed further and we must use the legal/political process to develop that international law. Litigation has a role to play in that process and might, over the long run, develop the law and the remedies that will deal with the problems. But do we have the time to develop the law that way? The necessarily slow nature of developing the law incrementally through litigation, combined with the urgent situation in which we find ourselves, means that, in this context, litigation may serve more as a prod to the policy process¹⁷⁴ than

172. See American Convention, *supra* note 11, art. 52-69.

173. Climate Legacy Initiative, Vermont Law School, <http://www.vermontlaw.edu/x8415.xml> (last visited Nov. 12, 2009).

174. See, e.g., *Massachusetts v. EPA*, 549 U.S. 497 (2007).

as a solution to the problem of global climate change—but it may be a necessary prod.

Competitiveness Border Adjustments in U.S. Climate Change Proposals Violate GATT: Suggestions to Utilize GATT's Environmental Exceptions

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ABSTRACT

Current and recent federal climate change cap-and-trade bills propose to use border adjustments to address economic competitiveness and emissions leakage concerns. These domestic trade measures impose costs on imported products in order to maintain a level playing field in the U.S. market for domestic products that may face unusually high climate change compliance costs. Energy-intensive U.S. industries are susceptible to loss of output, market share, investment, or firms, if regulation drastically increases their energy costs, as compared to unregulated, foreign competitors. Emissions leakage, which dilutes the effectiveness of federal regulation and can increase net global emissions, may also result, if output or firms move to unregulated, foreign nations. In order to address these competitiveness and leakage concerns, lawmakers plan to raise the cost of imports by an amount comparable to the costs of domestic regulation, using border adjustments.

However, as the border adjustments are currently structured, they violate the General Agreement on Tariffs and Trade ("GATT") non-

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discrimination principles. The border adjustments raise the costs of imported products based on the amount of greenhouse gas emissions occurring abroad during the manufacture of each product. In international trade, this type of regulation is a process and production method ("PPM") measure and cannot be used to distinguish between like products, either between U.S. and foreign goods or between foreign goods from different nations. As the amount of the border adjustment varies for each nation and product according to a PPM, the border adjustment violates GATT principles. Further, because domestic manufacturers may use the market-based cap-and-trade program while importers cannot, PPM-based border adjustments violate the National Treatment principle by favoring domestic products. Finally, by using national baselines in the PPM-based border adjustment calculations, the measure violates the Most Favored Nation principle by levying a different charge on like products that originate in different foreign nations.

The border adjustments will only survive a World Trade Organization ("WTO") challenge if they successfully invoke one of the GATT Article XX environmental exceptions. This will be difficult because, although federal climate change regulation has an environmental goal, the proposed border adjustments are targeted more toward preventing economic competitiveness losses than preventing leakage. For example, the border adjustments may only apply to WTO nations, or they may exempt least developed nations or nations with de minimis emissions. This limitation in scope not only fails to prevent leakage, it may increase emissions leakage to exempt nations. This article flags several provisions that may prevent use of the GATT's environmental exceptions, suggests alterations to help qualify for the exceptions, and also presents alternative channels for legitimizing the use of PPM-based border adjustments.

I. INTRODUCTION

Congress will likely adopt comprehensive climate change legislation in the near-future to prevent inflexible greenhouse gas ("GHG") regulations from taking effect. The U.S. Environmental Protection Agency ("EPA") has begun the process of promulgating command and control regulations to reduce domestic GHG emissions.¹

1. The Environmental Protection Agency ("EPA") has proposed "to find that greenhouse gases in the atmosphere endanger the public health and welfare of current and future generations." Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 18,886, 18,886 (Apr. 24, 2009) (to be codified at 40 C.F.R. ch. 1); *see also* U.S. EPA, *Proposed*

This regulatory effort, along with pressure from the executive branch, industries, and environmental concerns, will intensify pressure on Congress to adopt a more flexible and less expensive regulatory program, such as a cap or tax on GHG emissions.²

A cap-and-trade approach is the most popular and likely form of federal regulation.³ Cap-and-trade regulation places a nationwide cap on emissions. Allowances or permits are created at the level of the cap and

Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Clean Air Act, <http://epa.gov/climatechange/endangerment.html> (last visited Oct. 28, 2009). According to the proposed finding, regulation of GHG emissions under the Clean Air Act would initially address vehicle emissions. *Id.* However, the EPA has also recently issued a final rule requiring monitoring and reporting of greenhouse gas (“GHG”) emissions for large sources. Press Release, U.S. EPA, EPA Finalizes the Nation’s First Greenhouse Gas Reporting System (Sept. 22, 2009), *available at* <http://yosemite.epa.gov/opa/admpress.nsf/d0cf6618525a9efb85257359003fb69d/194e412153fcfea8525763900530d75!OpenDocument>. It has also issued a proposed rule requiring large facilities to “demonstrate the use of best available control technologies and energy efficient measures to minimize GHG emissions,” in order to obtain construction and operating permits. Press Release, U.S. EPA, New EPA Rule Will Require Use of Best Technologies to Reduce Greenhouse Gases from Large Facilities (Sept. 30, 2009), *available at* <http://yosemite.epa.gov/opa/admpress.nsf/d985312f6895893b852574ac005f1e40/21acdb a8fd5126a88525764100798aad!OpenDocument>.

2. “President Obama and [EPA] Administrator Jackson have repeatedly indicated their preference for comprehensive legislation.” Press Release, U.S. EPA, EPA Finds Greenhouse Gases Pose Threat to Public Health, Welfare (Apr. 17, 2009), *available at* <http://yosemite.epa.gov/opa/admpress.nsf/0/0EF7DF675805295D8525759B00566924>. Industries are lobbying for national climate change action to avoid piecemeal state action on the issue. Eric Lipton & Gardiner Harris, *In Turnaround, Industries Seek U.S. Regulations*, N.Y. TIMES, Sept. 16, 2007, *available at* http://www.nytimes.com/2007/09/16/washington/16regulate.html?_r=1&pagewanted=all. Insurance companies are also aligning themselves with environmentalists to contain climate change business risks. Press Release, Travelers, Leading Insurers, Public Officials and Environmental Groups Call for Bold Action to Adapt to Changing Climate Trends to Protect America’s Coastlines (Apr. 23, 2009), *available at* <http://investor.travelers.com/phoenix.zhtml?c=177842&p=irolnewsArticle&ID=1279972&highlight=>.

3. In 2007, the Lieberman-Warner Climate Security Act of 2008 was the first bill proposing economy-wide federal GHG emissions regulation to survive the committee process and arrive at the Senate floor for debate. U.S. Senator Joe Lieberman, Climate Change, <http://lieberman.senate.gov/issues/globalwarming.cfm> (last visited Oct. 28, 2009). This year, the American Clean Energy and Security Act of 2009, also a cap-and-trade program, was passed by the House and will be considered by the Senate in fall 2009. Jim Snyder, *Special Interests Battle for Climate Change Ground*, THE HILL, Aug. 20, 2009, *available at* <http://thehill.com/business-a-lobbying/55713-special-interests-battle-for-climate-change-ground>. The EPA is also developing options for an economy-wide cap-and-trade program to reduce GHG emissions to “approximately 83 percent below 2005 levels by 2050.” Office of Mgmt. & Budget, A NEW ERA OF RESPONSIBILITY: RENEWING AMERICA’S PROMISE, at 100, *available at* http://www.whitehouse.gov/omb/assets/fy2010_new_era/Environmental_Protection_Agency1.pdf (last visited Oct. 28, 2009).

auctioned or distributed to polluters. Firms may either purchase or redeem allowances for the right to emit GHGs. They may also reduce internal emissions below their mandated level and sell their allowances. The free market determines the price of allowances, thereby determining which firms will mitigate GHG emissions and how they will accomplish emission reductions. Cap-and-trade is popular among industries and politicians because compliance costs are perceived to be lower than costs under command and control regulations.⁴

With lower compliance costs, U.S. industry can better maintain its competitive edge against foreign competitors and mitigate emissions leakage. Lawmakers and industry fear that potential economic losses from unusually high compliance costs could reduce U.S. output, market share, jobs, investment, or firms.⁵ These potential economic

4. For example, a cap-and-trade program “reduced acid rain at much lower costs” than past regulatory efforts. Office of Mgmt. & Budget, *supra* note 3, at 100. The U.S. Climate Action Partnership, a coalition of major businesses and several environmental groups, believes that the United States’ climate protection goals can be met “in the most cost effective manner through an economy-wide, market-driven approach that includes a cap-and-trade program as a core element.” U.S. CLIMATE ACTION PARTNERSHIP, A BLUEPRINT FOR LEGISLATIVE ACTION: CONSENSUS RECOMMENDATIONS FOR U.S. CLIMATE PROTECTION LEGISLATION 6 (2009), available at http://www.us-cap.org/pdf/USCAP_Blueprint.pdf (last visited Oct. 28, 2009).

5. Trevor Houser, et al., LEVELING THE CARBON PLAYING FIELD: INTERNATIONAL COMPETITION AND U.S. CLIMATE POLICY DESIGN 2, available at http://pdf.wri.org/leveling_the_carbon_playing_field.pdf (2008) [hereinafter Houser]; see also Jason E. Bordoff, *International Trade Law and the Economics of Climate Policy: Evaluating the Legality and Effectiveness of Proposals to Address Competitiveness and Leakage Concerns* 3 (June 9, 2008) (unpublished working paper, in materials of Brookings conference *Climate Change, Trade and Competitiveness*), available at http://www.brookings.edu/events/2008/~media/Files/events/2008/0609_climate_trade/2008_bordoff.pdf (last visited Oct. 28, 2009) [hereinafter Bordoff]; Bernd G. Janzen, *International Trade Law and the “Carbon Leakage” Problem: Are Unilateral U.S. Import Restrictions the Solution?*, 8 SUST. DEV. L. & POL’Y 22, 22 (2008) [hereinafter Janzen]; Joost Pauwelyn, *U.S. Federal Climate Policy and Competitiveness Concerns: The Limits and Options of International Trade Law* 2 (Duke University, Working Paper NI WP 07-02, 2007), available at <http://www.nicholas.duke.edu/institute/internationaltradelaw.pdf> (last visited Oct. 28, 2009) [hereinafter Pauwelyn]; Moustapha Kamal Gueye, *Trade, Climate Change and Global Competitiveness*, in TRADE, CLIMATE CHANGE AND GLOBAL COMPETITIVENESS 1 (Int’l Ctr. for Trade and Sustainable Dev., 2008) [hereinafter Gueye]; Muthukumara Mani, *The Effects of Climate Change Policies on International Trade and Competitiveness: the China Factor*, in TRADE, CLIMATE CHANGE AND GLOBAL COMPETITIVENESS 10 (Int’l Ctr. for Trade and Sustainable Dev., 2008) [hereinafter Mani]; World Res. Inst., *International Trade, THE BOTTOM LINE ON...: ANSWERS TO FREQUENTLY ASKED QUESTIONS ABOUT CLIMATE CHANGE AND ENERGY POLICY*, Aug. 2008, at 1 [hereinafter World Res. Inst.]; Pew Ctr. on Global Climate Change, *Addressing Competitiveness in U.S. Climate Change Policy*, CONGRESSIONAL POLICY BRIEF, Nov. 2008, at 3 [hereinafter PEW CONGRESSIONAL POLICY BRIEF]; Joseph E. Aldy & William A. Pizer, *Issues in Designing U.S. Climate Policy* 18 (Res. for the

competitiveness reductions could trigger negative environmental impacts, particularly emissions leakage. Emissions leakage occurs when competition causes firms to relocate to other countries with more lenient environmental regulations and net global emissions remain the same or increase. This would ultimately undermine the environmental effectiveness of a federal emissions cap.⁶

In order to address competitiveness and leakage concerns, U.S. lawmakers have proposed border adjustments to accompany a cap in recent climate change legislation. Border adjustments are trade measures—similar to tariffs—intended to level the playing field by reflecting the cost of domestic regulation in imported products. Recent climate change bills propose a cap on national emissions supplemented by border adjustment mechanisms that regulate the embodied emissions⁷ of certain imported products.

As currently written, these border adjustments are incompatible with the non-discrimination obligations of the General Agreement on Tariffs and Trade (“GATT”)⁸; however, they may be justifiable under the environmental exceptions laid out in Article XX. The proposed border adjustments are based on the amount of GHGs emitted during the manufacture of an imported product, which is a process and production method (“PPM”) regulation. PPMs are an impermissible means for distinguishing products for tax or regulatory purposes under the National Treatment⁹ and Most Favored Nation¹⁰ non-discrimination obligations of the GATT. Because the proposed border adjustments employ PPMs to distinguish products, they violate GATT obligations. The border adjustments may survive a legal challenge by invoking GATT’s environmental exceptions, but only if they are found to be “necessary to

Future, June 2008) [hereinafter Aldy & Pizer]; AARON COSBEY & RICHARD TARASOFSKY, CLIMATE CHANGE, COMPETITIVENESS AND TRADE 3-4 (2007) [hereinafter COSBEY & TARASOFSKY].

6. INT’L INST. FOR SUSTAINABLE DEV., TRADE AND CLIMATE CHANGE: ISSUES IN PERSPECTIVE 21 (Aaron Cosbey, ed., 2008) [hereinafter ISSUES IN PERSPECTIVE]; Janzen, *supra* note 5, at 22; Pauwelyn, *supra* note 5, at 4; World Res. Inst., *supra* note 5, at 1.

7. Embodied emissions refer to the amounts of “carbon dioxide [and other GHGs] emitted at all stages of a good’s manufacturing process, from the mining of raw materials through the distribution process, to the final product provided to the customer.” ISSUES IN PERSPECTIVE, *supra* note 6, at 40.

8. Discussed *infra*. See General Agreement on Tariffs and Trade, Oct. 30, 1947, T.I.A.S. No. 1700, 55 U.N.T.S. 194 [hereinafter GATT].

9. *Id.*, art. III. The National Treatment obligation prohibits regulatory programs that discriminate between like domestic and imported products in a way that affords protection to domestic products.

10. See *Id.* art. I. The Most Favored Nation obligation requires the same treatment between like imported products from different nations.

protect human, animal or plant life or health”¹¹ or related “to the conservation of exhaustible natural resources”.¹²

This paper evaluates whether recently proposed border adjustments can be justified under GATT’s Article XX environmental exceptions. Part II frames this investigation by further exploring the concept of competitiveness, its potential adverse impacts, and the ways to mitigate these impacts. Part III details the border adjustments incorporated in recently proposed federal cap-and-trade regulations followed by an explanation in Part IV of why these border adjustments are not compliant with the GATT. Part V evaluates whether the border adjustments are justified under GATT’s environmental exceptions. Lastly, Part VI concludes by suggesting ways to improve both the proposed border adjustments and other avenues available to address competitiveness and leakage concerns.

II. COMPETITIVENESS

Most industrial nations are concerned with the potential competitiveness impacts of domestic climate change regulation. Economic competitiveness concerns and their potential negative environmental consequences are tied to unusually high regulatory compliance costs that result from energy-intensive processes that cannot be altered. Most U.S. industry processes are not so energy intensive that they would incur unusually high regulatory compliance costs. Further, many energy-intensive processes can be altered without impacting the ability of the final products to compete in a global marketplace. Therefore, competitiveness losses resulting from climate change regulation are not a concern for most U.S. industries. Competitiveness losses are likely only a concern for six energy-intensive industries¹³ that would incur unusually high costs for compliance with climate change requirements.

A. *Economic and Environmental Competitiveness Concerns*

For a firm, competitiveness concerns resulting from climate change regulation are “adverse business impacts related to domestic GHG

11. *Id.* art. XX(b). To invoke this exception, the border adjustment must also satisfy the requirements of the Article XX chapeau, discussed *infra*.

12. *Id.* art. XX(g). To invoke this exception, the border adjustment must also satisfy the requirements of the Article XX chapeau, discussed *infra*.

13. According to analysts, those six industries are petroleum, refining, paper and pulp, nonmetallic mineral products, chemicals, and ferrous and nonferrous metals. *See infra* note 28.

regulation *and* the absence of regulation on international competitors.”¹⁴ For a nation, economic competitiveness fears refer to a potential loss of global productivity for national industry due to higher than usual regulatory compliance costs.¹⁵ If regulated U.S. goods cannot compete with unregulated foreign goods, the United States may suffer a loss of output, market share, jobs, investment, or even firms to unregulated nations.¹⁶

There are also environmental consequences to economic competitiveness losses. For example, emissions leakage may occur when “*output of energy-intensive industries*” relocates to nations without climate change regulation, either by a firm moving abroad or through a reduction of domestic production that increases production in unregulated nations.¹⁷ Leakage may also result as climate change regulation alters world energy prices. Cap-and-trade programs and carbon taxes will increase the cost of fossil fuels, driving up the demand and price of renewable energy. As prices for renewable energy increase in these regulated nations, unregulated nations are free to increase consumption of fossil fuels at lower prices.¹⁸

Leakage causes economic and environmental losses that undermine the effectiveness of federal climate change regulation.¹⁹ Instead of reducing net emissions globally, emissions leakage results in constant or

14. Aldy & Pizer, *supra* note 5, at 24.

15. World Res. Inst., *supra* note 5, at 1.

16. *See supra* note 5.

17. Jeffrey Frankel, *Options for Addressing the Leakage/Competitiveness Issue in Climate Change Proposals 4* (June 9, 2008) (unpublished working paper, in materials of Brookings conference *Climate Change, Trade and Competitiveness*), available at http://www.brookings.edu/events/2008/~media/Files/events/2008/0609_climate_trade/2008_frankel.pdf (emphasis added) (last visited Oct. 28, 2009) [hereinafter Frankel]; *see also* Janzen, *supra* note 5, at 22; Pauwelyn, *supra* note 5, at 2; Gueye, *supra* note 5, at 1; Mani, *supra* note 5, at 10; World Res. Inst., *supra* note 5, at 1; Bordoff, *supra* note 5, at 3. This paper does not consider that firms in other nations may have more efficient production methods than existing U.S. firms.

18. Frankel, *supra* note 17, at 4; ISSUES IN PERSPECTIVE, *supra* note 6, at 33; Warwick J. McKibbin & Peter J. Wilcoxon, *The Economic and Environmental Effects of Border Tax Adjustments for Climate Policy 3* (June 9, 2008) (unpublished working paper, in materials of Brookings conference *Climate Change, Trade and Competitiveness*), available at http://www.brookings.edu/events/2008/~media/Files/events/2008/0609_climate_trade/2008_mckibbin_wilcoxon.pdf (last visited Oct. 28, 2009); Thomas L. Brewer, *Addressing Climate Change Related Competitiveness Concerns: Approaches in the EU and the US and Their Implications for China*, in TRADE, CLIMATE CHANGE AND GLOBAL COMPETITIVENESS 14 (Int’l Ctr. for Trade and Sustainable Dev., 2008) [hereinafter Brewer].

19. ISSUES IN PERSPECTIVE, *supra* note 6, at 21; World Res. Inst., *supra* note 5, at 1; Bordoff, *supra* note 5, at 3; Frankel, *supra* note 17, at 3.

increased global emission levels.²⁰ Additionally, if compliance costs drive production abroad and domestic goods are priced higher than imported goods, consumption in the United States will “shift to more carbon-intensive imports”.²¹

B. Competitiveness is Only a Concern for Six U.S. Industries

Competitiveness concerns only emerge in energy-intensive industries because of their unusually high compliance costs.²² A federal cap on GHG emissions will increase national energy costs²³ for all U.S. manufacturers.²⁴ Many firms can mitigate these compliance costs by switching to renewable energy, increasing efficiency, or passing increased costs on to customers.²⁵ Increased energy costs will not raise competitiveness concerns unless they are significant enough to disadvantage U.S. firms against foreign, unregulated competitors.²⁶

Energy-intensive industries are sensitive because their high-energy use results in compliance costs that could potentially push the price of U.S. goods above similar unregulated foreign products. Competitiveness losses are only possible where certain industries' higher regulatory compliance costs, resulting from an industry's disproportionately high emissions or energy use, cannot be passed on to consumers because product prices set in the global marketplace are lower than can be achieved with domestic regulation.²⁷

20. See *supra* note 6.

21. Bordoff, *supra* note 5, at 3; see also Janzen, *supra* note 5, at 22; Mani, *supra* note 5, at 10.

22. See *infra* note 27.

23. Both facility-specific emission costs (as a result of the emission cap) and general energy costs (as a result of power plant regulation and shifting demand) will increase for manufacturers. PEW CONGRESSIONAL POLICY BRIEF, *supra* note 5, at 3, 5. However, internalizing the environmental and health costs of certain fossil fuels, which can lead to rising energy costs, is an underlying purpose of climate change regulation. TRADE AND CLIMATE CHANGE: WTO-UNEP REPORT 88 (2009) (“Climate change resulting from emissions of greenhouse gases is, in economic terms, a negative externality.” Setting a price on GHG emissions is a key policy response to this externality.).

24. Pauwelyn, *supra* note 5, at 2; PEW CONGRESSIONAL POLICY BRIEF, *supra* note 5, at 3, 5.

25. See ISSUES IN PERSPECTIVE, *supra* note 6, at 22; World Res. Inst., *supra* note 5, at 1.

26. Pauwelyn, *supra* note 5, at 2.

27. PEW CONGRESSIONAL POLICY BRIEF, *supra* note 5, at 2; see also Gueye, *supra* note 5, at 1; World Res. Inst., *supra* note 5, at 1; COSBEY & TARASOFSKY, *supra* note 5, at 7-8.

Analysts believe that only six U.S. industries—petroleum, refining, paper and pulp, nonmetallic mineral products, chemicals, and ferrous and nonferrous metals²⁸—face potential competitiveness losses. These six industries employ very energy-intensive processes and also face tight global competition, fixed facility infrastructure, and the increasing costs of energy substitutes.²⁹ Therefore, it is more difficult for these industries to quickly implement efficiency improvements, switch to clean energy sources, or pass increased costs on to customers,³⁰ resulting in greater regulatory compliance costs. If these costs are too high—meaning these companies cannot internalize the compliance costs without raising prices above global market rates—these industries will face competitiveness losses and the United States could face emissions leakage.

C. Strategies for Reducing the Competitiveness Effects of Climate Change Regulation

For industries facing potential competitiveness losses due to unusually high compliance costs, a comprehensive climate change program can maintain competitiveness and prevent leakage by reducing the costs of domestic compliance or increasing the costs of competing imported products.³¹ Domestic compliance costs may be contained by capping the price of domestic emissions allowances, permitting emitters to bank or borrow emissions allowances, permitting the use of offset projects to reduce allowance requirements, freely allocating allowances, using the proceeds of allowance auctions to assist the industries, or fully exempting the exposed industries from the regulation.³²

Alternatively, competitiveness issues may be addressed by reflecting the cost of domestic regulation in imported products. This is accomplished by placing domestic trade measures on imported products,

28. HOUSER, *supra* note 5, at 8. A large amount of energy is required to manufacture goods such as “steel, aluminum, cement, paper, and glass.” PEW CONGRESSIONAL POLICY BRIEF, *supra* note 5, at 2; *see also* ISSUES IN PERSPECTIVE, *supra* note 6, at 22; Janzen, *supra* note 5, at 23; Pauwelyn, *supra* note 5, at 2; Gueye, *supra* note 5, at 1; Mani, *supra* note 5, at 11. If competitiveness provisions are incorporated into national climate regulation, they should be restricted to these six industries, not used to assist with the broader economic transition. ISSUES IN PERSPECTIVE, *supra* note 6, at 22.

29. World Res. Inst., *supra* note 5, at 1; HOUSER, *supra* note 5, at 8; ISSUES IN PERSPECTIVE, *supra* note 6, at 22; COSBEY & TARASOFSKY, *supra* note 5, at 7-8.

30. World Res. Inst., *supra* note 5, at 1; HOUSER, *supra* note 5, at 8; COSBEY & TARASOFSKY, *supra* note 5, at 7-8.

31. ISSUES IN PERSPECTIVE, *supra* note 6, at 20-21; Gueye, *supra* note 5, at 1; World Res. Inst., *supra* note 5, at 2; Aldy & Pizer, *supra* note 5, at 18; PEW CONGRESSIONAL POLICY BRIEF, *supra* note 5, at 4, 8.

32. HOUSER, *supra* note 5, at 16; World Res. Inst., *supra* note 5, at 2.

including the proposed border adjustments that impose costs on imported goods similar to the costs imposed on domestic goods by climate change regulation. Border adjustments are intended to prevent economic competitiveness losses and the potential for emissions leakage. The United States must proceed with caution when using trade measures to address competitiveness concerns and emissions leakage because unilateral trade measures are diplomatically controversial and may violate international trade obligations.

III. COMPETITIVENESS BORDER ADJUSTMENT PROPOSALS IN RECENT U.S. LEGISLATION

Competitiveness concerns are the primary reason that the United States did not participate in the Kyoto Protocol³³ and will remain a driving force in fleshing out federal climate change regulation. While U.S. lawmakers agree that international cooperation is the best approach to both reducing emissions and addressing competitiveness concerns,³⁴ they are also resolute to adopt unilateral trade measures to address competitiveness concerns in national climate change regulation.³⁵

33. The Kyoto Protocol, the first protocol under the United Nations Framework Convention on Climate Change, posed competitiveness concerns because it imposed mandatory reductions on developed nations without equivalent requirements on developing nations. The Senate unanimously resolved not to participate in the Kyoto Protocol because it believed that requiring emissions reductions of the industrial nations but not developing nations “could result in serious harm to the United States economy, including significant job loss, trade disadvantages, increased energy and consumer costs.” Byrd-Hagel Resolution, S. Res. 98, 105th Cong. (1997). President Bush later formally rejected the protocol because it did not include China and India and it could pose potential harm to the U.S. economy. Andrew C. Revkin, *U.S. Is Taking a Back Seat in Latest Talks on Climate*, N.Y. TIMES, Oct. 29, 2001, available at <http://www.nytimes.com/2001/10/29/world/us-is-taking-a-back-seat-in-latest-talks-on-climate.html>.

34. American Clean Energy and Security Act of 2009, H.R. 2454, 111th Cong. §§ 761(c), 765(a), 766(a) (2009) [hereinafter ACES Act]; Lieberman-Warner Climate Security Act of 2008, S. 3036, 110th Cong. § 6003(a) (2008) [hereinafter Climate Security Act of 2008]; Climate Market Auction Trust and Trade Emissions Reduction System Act of 2008, H.R. 6316, 110th Cong. § 115 (2008) [hereinafter Climate MATTERS Act]; Investing in Climate Action and Protection Act, H.R. 6186, 110th Cong. § 763(a) (2008) [hereinafter I-CAP Act]; see also HOUSER, *supra* note 5, at 59.

35. Each of the four cap-and-trade proposals covered in this paper address both economic and environmental competitiveness concerns. In the 111th Congress, “several Democratic senators from Rust Belt and coal-producing states have warned that they may not support legislation that lacks sufficient protections for their home-state manufacturing and mining interests.” Ian Talley & Stephen Power, *Democrats Tangle on Climate Change*, WALL ST. J., Mar. 12, 2009, available at <http://online.wsj.com/article/SB123679042118496965.html>; see also Letter from Sherrod Brown, Debbie Stabenow,

A. *Recent Federal Cap-and-Trade Climate Change Bills*

The most prominent cap-and-trade climate change bill in the 111th Congress³⁶—the American Clean Energy and Security Act³⁷ (“ACES Act”)—is structurally similar to three cap-and-trade bills from 2008. In each cap-and-trade proposal, a national cap will be placed on GHG emissions and will be lowered over time to achieve reduction targets for domestic GHG emissions.³⁸ These emissions-reduction targets are significant and could potentially expose energy-intensive domestic industries to unusually high compliance costs.³⁹ It will be extremely difficult for these industries to accomplish reductions comparable to the general reduction targets over the same time period.⁴⁰ Therefore, all four bills also propose trade measures to address economic competitiveness and leakage concerns.

The ACES Act seeks to reduce GHG emissions to three percent below 2005 levels in 2012, twenty percent below 2005 levels in 2020, forty-two percent below 2005 levels in 2030, and eighty-three percent below 2005 levels in 2050.⁴¹ These reductions will be difficult to accomplish for facilities in energy-intensive industries. The cap subjects eighty-five percent of total U.S. emissions to the reductions.⁴² Initially,

Russell D. Feingold, Carl Levin, Evan Bayh, Robert P. Casey, Robert C. Byrd, Arlen Specter, John D. Rockefeller IV, and Al Franken, U.S. Senators, to Barack Obama, U.S. President (Aug. 6, 2009), *available at* <http://bayh.senate.gov/imo/media/doc/2009-8-6ClimChange.pdf>.

36. As of August 23, 2009. Several other climate change-related bills implicate competitiveness and leakage concerns. One proposed Senate resolution recognizes that reducing emissions may make the United States “*more competitive globally.*” Cleaner, Greener, and Smarter Act of 2009, S. 5, 111th Cong. (2009) (emphasis added). This proposed resolution also notes that climate change regulation will reduce dependence on foreign oil, secure sustainable energy sources, and reduce climate change risks. *Id.* While this paper only addresses cap-and-trade regulatory proposals, it is important to note that a carbon tax and a cap-and-trade regulatory scheme are not mutually exclusive.

37. This paper uses the text of the ACES Act that was passed by the House. The ACES Act is based upon the climate change discussion draft released by the House Committee on Energy and Commerce in 2008. The 461-page discussion draft was the product of two years of work and was “the subject of more than two dozen hearings.” Dina Capiello, *House Democrats Unveil Draft Climate Change Bill*, USA TODAY, Oct. 8, 2008, *available at* http://www.usatoday.com/weather/climate/globalwarming/2008-10-08-house-climate-change-bill_N.htm (last visited Oct. 28, 2009).

38. Environmental Defense Fund, Cap and trade 101, 2, http://www.edf.org/documents/7953_captrade101_052708.pdf (last visited Oct. 28, 2009).

39. *See supra* notes 14, 26-27, 29-30 and accompanying text.

40. *See supra* notes 29-30 and accompanying text.

41. ACES Act § 702.

42. Comm. on Energy and Commerce, *Discussion Draft Summary: The American Clean Energy and Security Act of 2009* 3, *available at* <http://energycommerce.house.gov/>

vulnerable industries will receive certain “rebates” to assist with compliance costs, including an undetermined amount of free allowances.⁴³ Interestingly, presidential certification and a joint congressional resolution can avoid the implementation of a border adjustment before 2018 if the trade measure is not in the best economic or environmental interest of the nation.⁴⁴

In June 2008, the Lieberman-Warner Climate Security Act of 2008 (“Climate Security Act of 2008”) was the first climate change cap-and-trade bill debated on the Senate floor.⁴⁵ The bill would have reduced GHG emissions to “4% below 2005 levels by 2012; 19% below 2005 levels by 2020; and 71% below 2005 levels by 2050.”⁴⁶ The bill would have capped eighty-seven percent of U.S. emissions but freely distributed seventy-five percent of the allowances within the cap.⁴⁷ Free distribution of allowances was intended to assist with the potentially high regulatory costs of these reductions.

The Climate Market Auction Trust and Trade Emissions Reduction System Act of 2008 (“Climate MATTERS Act of 2008”) would have reduced GHG emissions to eighty percent below 1990 levels by 2050.⁴⁸ Eighty-five percent of the allowances were to be distributed by auction at the start of the program, increasing to a full auction by 2020.⁴⁹ This program, with significant long-term reductions and an early elimination of domestic cost-containment programs, would likely result in unusually high compliance costs, competitiveness losses, and emissions leakage if energy-intensive industries are subject to the same reduction requirements.

The Investing in Climate Action and Protection Act (“I-CAP Act”) would have “cut emissions 85% by the year 2050, set up a system for 100% auctions and invest[ed] money generated from polluters back to

Press_111/20090331/acesa_summary.pdf (last visited Oct. 10, 2009).

43. *Id.* at 1, 4.

44. ACES Act § 767(a)(3), (b)(1).

45. Pew Center on Global Climate Change, Analysis of the Lieberman-Warner Climate Security Act of 2008, <http://www.pewclimate.org/analysis/l-w> (last visited Oct. 10, 2009).

46. Pew Center on Global Climate Change, S. 3036—the Lieberman-Warner Climate Security Act of 2008, <http://www.pewclimate.org/docUploads/L-Wonopager.pdf> (last visited Oct. 28, 2009).

47. *Id.* By 2032, the bill would transition to a sixty percent auction of allowances. *Id.*

48. Brad Johnson, *House Democrats Introduce Climate MATTERS Act*, HILL HEAT, June 17, 2008, <http://www.hillheat.com/articles/2008/06/17/house-democrats-introduce-climate-matters-act> (last visited Oct. 28, 2009).

49. *Id.*

consumers and clean technology solutions.”⁵⁰ This bill covered eighty-seven percent of U.S. emissions and sought to “reduce covered emissions to 2005 levels by 2012, to 20 percent below 2005 levels by 2020, and to 85 percent below 2005 levels by 2050.”⁵¹

B. Summary of Relevant Trade Provisions in the Border Adjustments

All recent federal cap-and-trade bills contain border adjustments to address economic competitiveness and leakage concerns. Border adjustments level the playing field for domestic products in the U.S. market by requiring “importers [of products] from countries without a comparable emissions reduction policy [to] purchase emissions allowances to cover the” GHGs emitted during the manufacture of the imported product.⁵² The number of these international reserve allowances⁵³ that importers must purchase is based upon the emissions embodied in each imported product. The international reserve allowances are generally priced the same as domestic emission allowances because they are intended to reflect the cost of domestic regulation in imported products.⁵⁴ However, each proposed bill takes a slightly different regulatory approach.

50. Congressman Ed Markey, *I-CAP: Investing in Climate Action and Protection Act*, http://markey.house.gov/index.php?option=com_content&task=view&id=3376 (last visited Oct. 28, 2009).

51. Congressman Ed Markey, *Executive Summary of Rep. Markey’s Climate Legislation*, http://markey.house.gov/docs/icap_exec_sum.pdf (last visited Oct. 28, 2009).

52. Bordoff, *supra* note 5, at 3-4; *see also* Gueye, *supra* note 5, at 2; Brewer, *supra* note 18, at 14.

53. ACES Act § 768(a)(1)(C); Climate Security Act of 2008 § 6006(a)(2); Climate MATTERS Act § 111(a)(1)-(2); I-CAP Act § 765(a)(2). The number of required allowances is determined annually by a complicated formula taking into account the average GHG intensity (direct and indirect emissions) to manufacture a covered product in an exporting nation, the total emissions attributable to that industry in a nation, the amount of free allowances distributed to that industry in the United States, and any regulatory or other programs implemented by the exporting nation. ACES Act § 768(a)(1)(C); Climate Security Act of 2008 § 6006(d)(1)(B), (d)(2); Climate MATTERS Act § 111(e); I-CAP Act § 765(d).

54. International reserve allowances are intended to reflect the price of domestic compliance, which is determined by the free market in a cap-and-trade system. As discussed *infra*, the international reserve allowances must be priced the same as the capped domestic emission allowances to properly reflect domestic compliance costs.

1. Only Products from Certain Nations are Subject to Border Adjustments

Each bill initially determines which products are subject to border adjustments according to their home nation, not according to the type of product or amount of embodied emissions. While the ACES Act initially subjects products from all foreign nations to border adjustments, previous proposed bills only apply border adjustments to products from WTO participants.⁵⁵

Furthermore, each bill exempts products from certain nations based on the circumstances of the nation or the United States' relationship with that nation. For example, all proposals exempt products from border adjustments if they are from nations that are *de minimis* GHG emitters.⁵⁶ The 2008 proposals also exempt products from the border adjustment if a nation has taken regulatory action comparable to the United States.⁵⁷ Three proposals exempt products from the world's least developed nations.⁵⁸ Finally, two proposals also exempt products from nations that have entered into separate agreements with the United States.⁵⁹

Although the border adjustments are calculated based upon the embodied emissions of imported *products*, the border adjustments are initially applied based on whether a product's home *nation* is subjected to the regulation. As a result, border adjustments are applied to the products of certain nations while the same products from other nations are exempted. This aspect of the measure clearly addresses a protectionist purpose: it preserves economic competitiveness against targeted foreign imports but does nothing to prevent potential emissions leakage because it does not regulate the imports of all nations.

2. Only Certain Products are Subject to Border Adjustments

Regulatory proposals also restrict border adjustments to certain products. All proposals subject "primary products" with high GHG

55. ACES Act § 768(a)(1)(E); Climate Security Act of 2008 §§ 6006(b), 6001(6); Climate MATTERS Act § 111(b)(2)-(3); I-CAP Act §§ 765(b)(3), 761(4).

56. ACES Act § 768(a)(1)(E)(iii); Climate Security Act of 2008 § 6006(b); Climate MATTERS Act § 111(b)(2); I-CAP Act § 765(b)(2)(B).

57. Climate Security Act of 2008 § 6006(b); Climate MATTERS Act § 111(b)(2)(A)(i); I-CAP Act § 765(b)(2)(A). The ACES Act exempts specific foreign industrial sectors that have "an annual energy or greenhouse gas intensity" equal to or less than that industrial sector in the U.S. ACES Act §§ 768(a)(1)(E)(i), 767(c)(3).

58. ACES Act § 768(a)(1)(E)(ii); Climate MATTERS Act § 111(b)(2)(iv); I-CAP Act § 765(b)(2)(C).

59. ACES Act §§ 768(a)(1)(E)(i), 767(c); Climate MATTERS Act § 111(b)(2)(ii).

emission levels to border adjustments.⁶⁰ These primary products are generally those produced from the six energy-intensive industries exposed to competitiveness and leakage, as discussed *supra*. They typically include iron, steel, aluminum, cement, bulk glass, paper and pulp, chemicals, and industrial ceramics.⁶¹ Primary products undergo fewer manufacturing processes so it is purportedly easier to calculate their embodied emissions.⁶² Therefore, restricting border adjustments to primary products covers the products most susceptible to competitiveness losses and leakage while easing the border adjustment's incredible administrative and funding obligations.

However, the ACES Act and Climate MATTERS Act also cover any "manufactured item for consumption" that generates "a substantial quantity of greenhouse gas emissions" and is "closely related" to a domestic good whose production cost is affected by federal climate change regulation.⁶³ These goods typically go through more manufacturing processes, so calculating border adjustments for each product from each nation would make administering a border adjustment system more complex and costly. From an international trade perspective, a very complex and costly border adjustment mechanism could indicate a protectionist purpose, rather than a goal of reducing domestic emissions while preventing leakage. The most effective border adjustment would be applied only to primary products.

60. "Primary product" is a defined term in proposed climate change legislation. Climate Security Act of 2008 § 6001(5); Climate MATTERS Act § 101(9); I-CAP Act §§ 765(c)(1), 761(7), 723(a)(4), 723(a)(6). A "primary product" is generally defined as a product that "generates . . . a substantial quantity of [direct and indirect] greenhouse gas emissions" and is "closely related" to a domestic good whose production cost is affected by federal climate change regulation. Climate Security Act of 2008 § 6001(10); Climate MATTERS Act § 101(18). The I-CAP Act further restricts covered goods to "trade exposed primary goods" that are "likely to be significantly disadvantaged in internationally competitive markets as a result of direct and indirect" compliance costs. I-CAP Act §§ 761(7), 723(a)(6). The ACES Act has a distinct and complicated methodology for determining covered goods. ACES Act § 762(2), (5)(A). Practically, it appears that both primary products and some manufactured items for consumption would be covered by the regulation. *See* ACES Act §§ 762, 763.

61. Climate Security Act of 2008 § 6001(10); Climate MATTERS Act § 101(18)(A); I-CAP Act § 723(a)(4). These definitions also include any other manufactured product "sold in bulk for purposes of further manufacture." I-CAP Act § 723(a)(4).

62. Aldy & Pizer, *supra* note 5, at 20.

63. Climate MATTERS Act § 101(9). Again, the ACES Act determination is more complicated. *See* ACES Act §§ 762, 763.

3. Pricing International Reserve Allowance Requirements

Importers must purchase international reserve allowances to meet their allowance requirements under each border adjustment.⁶⁴ In each proposal, the methodology for calculating the price for an international reserve allowance is set by an executive official.⁶⁵ Two proposals cap the maximum price for an international allowance at the price of domestic allowances.⁶⁶ One proposal sets the price at the fair market value of emissions allowances over the last year.⁶⁷ The ACES Act directs the administrator to determine a specific methodology but caps the international reserve allowance price at the “clearing price” for the most recent domestic emission allowance auction.⁶⁸ To truly level the playing field and reflect domestic regulatory costs in imported goods, the international reserve allowance prices should be tied to current domestic allowance prices.

4. Flexibility to Alter Regulations

Three bills designate an administrator to determine the level of the border adjustment and to adjust the international reserve allowance requirements annually to increase the effectiveness of the program.⁶⁹ In some proposals, the administrator could also adjust the programs as necessary to comply with trade or international agreements.⁷⁰

The three 2008 proposals address competitiveness concerns in significant detail, laying out the likely framework for future trade measures and regulations. They require importers of goods to purchase international emission allowances to account for the embodied emissions of each regulated imported product. The ACES Act assigns the creation

64. ACES Act § 768(a)(1), Climate Security Act of 2008 § 6006(c); Climate MATTERS Act § 111(d); I-CAP Act § 765(c).

65. ACES Act § 768(a)(1)(B); Climate Security Act of 2008 § 6006(a)(3); Climate MATTERS Act § 111(a)(3); I-CAP Act § 765(a)(3).

66. Climate Security Act of 2008 § 6006(a)(3); Climate MATTERS Act § 111(a)(3).

67. I-CAP Act § 765(a)(3).

68. ACES Act § 768(a)(1)(B).

69. Climate Security Act of 2008 § 6007(b); Climate MATTERS Act § 112; I-CAP Act § 766. The Climate Security Act of 2008 also grants the President the power to “temporarily adjust, suspend, or waive” these regulations, after notice and comment, in the interest of national security. Climate Security Act of 2008 § 9001(a). Under the Climate MATTERS Act, this includes the power to “address greenhouse gas emissions that are... not subject to the international reserve allowance requirements” in order to address potential carbon leakage. Climate MATTERS Act § 112(b)(2).

70. Climate Security Act of 2008 § 6006(g); Climate MATTERS Act § 111(h); I-CAP Act § 765(g).

of the detailed plan to the administrator.⁷¹ Given the similarity between these proposals, the ACES Act would likely result in a similar program.

IV. EACH BILL VIOLATES GATT'S NATIONAL TREATMENT AND MOST FAVORED NATION PRINCIPLES

The GATT⁷² was designed to reduce national tariff and nontariff barriers to world trade in goods.⁷³ The World Trade Organization ("WTO") administers the GATT, settles member disputes,⁷⁴ and can authorize retaliatory tariffs for GATT violations.⁷⁵ Although the GATT dispute-settlement mechanism is not bound by a principle of *stare decisis*, dispute-settlement bodies consistently rely upon previous decisions.⁷⁶ Therefore, weighing the proposed border adjustments against previous WTO decisions is important to predict a measure's compliance with the GATT. Here, both the impermissible use of PPMs to distinguish which products are subject to a border adjustment and the scope and application of each proposed border adjustment violate the GATT non-discrimination obligations.

Non-discrimination is a central tenant of the GATT. Non-discrimination obligations are framed by the National Treatment principle (Article III) and the Most Favored Nation principle (Article I). The National Treatment principle prohibits discrimination between *like* domestic and imported products in a way that treats imported products less favorably.⁷⁷ The Most Favored Nation principle requires that any

71. ACES Act § 768.

72. While a comprehensive analysis would also examine individual trade agreements between the United States and other nations, like the North American Free Trade Agreement, this paper analyzes only the multilateral GATT.

73. Ruth Wallick, *GATT and Preemption of State and Local Laws*, GOV'T FIN. REVIEW, Oct. 1994, available at http://findarticles.com/p/articles/mi_hb6642/is_n5_v10/ai_n28648118/ (last visited Oct. 28, 2009).

74. In 1995, the implementation of the Uruguay Round created the WTO and a new dispute settlement mechanism. Jeanne J. Grimmett, *WTO Dispute Settlement: Status of U.S. Compliance in Pending Cases*, CRS REPORT FOR CONGRESS 2 (updated Aug. 14, 2007), available at <http://www.nationalaglawcenter.org/assets/crs/RL32014.pdf>. If a participating nation objects to another member's national laws affecting trade, it may lodge a complaint with the WTO.

75. Bordoff, *supra* note 5, at 7.

76. JASON POTTS, THE LEGALITY OF PPMs UNDER THE GATT: CHALLENGES AND OPPORTUNITIES FOR SUSTAINABLE TRADE POLICY 9 (2008) [hereinafter POTTS].

77. GATT art. III:4. Differential treatment between domestic and imported goods is permitted unless a regulation adversely impacts the competitive opportunities of the imported product. ENVIRONMENT AND TRADE: A HANDBOOK 35 (2d ed. 2005) [hereinafter

advantage granted by a WTO member “to any product originating in . . . any other country shall be accorded immediately and unconditionally to the” *like* products of other parties.⁷⁸ In essence, the GATT non-discrimination principles prevent WTO members from discriminating between like domestic and imported products and between like products imported from different foreign nations.

*A. The Use of PPMs in the Proposed Border Adjustments
Violates GATT Obligations*

Under Article I and III of the GATT,⁷⁹ two products are *like* products if they have the same or similar physical properties or characteristics, end uses, consumer preferences, or tariff classifications.⁸⁰ Because PPMs do not affect products, like products cannot be differentiated based on PPMs.⁸¹ The GATT permits tax and regulatory distinctions for products that can be physically distinguished but not between products that are manufactured differently but are physically indistinguishable.

GHG emissions occur during the manufacturing of an imported product. The emissions are not reflected in a product’s physical

HANDBOOK]: *see also* POTTS, *supra* note 76, at 11.

78. GATT art I:1. *See also* ANUPAM GOYAL, *THE WTO AND INTERNATIONAL ENVIRONMENTAL LAW: TOWARDS CONCILIATION* 102-03 (Oxford Press 2006).

79. The same test for like products is used for Article I and III. Panel Report, *Indonesia – Certain Measures Affecting the Automobile Industry*, ¶ 14.141, WT/DS54/R, WT/DS55/R, WT/DS59/R, WT/DS64/R (July 2, 1998) [hereinafter *Indonesia – Autos Panel Report*].

80. Appellate Body Report, *European Communities – Measures Affecting Asbestos and Asbestos-Containing Products*, ¶ 101, WT/DS135/AB/R (Mar. 12, 2001) [hereinafter *EC – Asbestos AB Report*]. Under Article III:4, the “competitive relationship between and among products” is a likeness consideration and “evidence relating to health risks may be relevant in assessing the *competitive relationship in the marketplace* between allegedly ‘like’ products.” *Id.* ¶¶ 103, 115. However, the health risks from GHG emissions in manufacturing processes do not yet distinguish products in a market in the same way that the health risks of asbestos distinguished it from substitute products in this case. Again, GHG emissions—unlike asbestos crystals—are not a physical characteristic of products. *See infra* note 82 and accompanying text.

81. Article III only covers “measures affecting products as such.” Panel Report, *United States – Restrictions on Imports of Tuna*, ¶¶ 5.11, 5.14, WTO/DS21/R (Sept. 3, 1991) (unadopted) (indicating Article III and guidance document Note Ad Article III concern products, not processes). Article I also specifically refers to products. PPM regulations do not affect the physical characteristics of a product so they cannot distinguish like products. CHRIS WOLD, ET AL., *TRADE AND THE ENVIRONMENT: LAW AND POLICY* 208 (Carolina Academic Press 2005). WTO members discourage PPM distinctions in trade because PPM regulations allow one government “to dictate environmental policy to another.” *Id.* at 167.

properties or characteristics, end uses, or tariff classifications.⁸² Even if U.S. consumers strongly preferred products with low GHG emissions, the WTO cannot overlook the other factors of a *likeness* test.⁸³ The proposed border adjustments are PPM regulations because they are applied based on the embodied GHG emissions of imported products. As PPM measures, the border adjustments cannot be used to distinguish between otherwise-like products without violating the GATT's non-discrimination principles.⁸⁴ Unfortunately, this is exactly what the border adjustments do.

B. *The Proposed Border Adjustments Violate the National Treatment Principle*

Trade measures violate the National Treatment principle if they affect the domestic sale of like products and accord less favorable treatment to imported products.⁸⁵ Less favorable treatment results where there is an inequality in competitive opportunities.⁸⁶ In *United States – Standards for Reformulated and Conventional Gasoline* (“*United States-Gasoline*”), a WTO dispute panel decided that the United States accorded less favorable treatment to imports by measuring emissions according to a national standard for imports while allowing domestic producers of like products to use individual baselines.⁸⁷ This regulation

82. Accordingly, the end-product of steel is considered a like product and thus cannot be treated differently regardless of whether it is manufactured in a climate-friendly manner or in a way that harms the climate. Bordoff, *supra* note 5, at 11. Although tariff classifications do not currently distinguish goods based on GHG emissions, this is an option being discussed pursuant to a project to liberalize trade in environmentally preferable products. *See generally* ISSUES IN PERSPECTIVE, *supra* note 6.

83. *EC – Asbestos AB Report*, *supra* note 80, ¶ 109.

84. Bordoff, *supra* note 5, at 11.

85. Appellate Body Report, *Korea – Measures Affecting Imports of Fresh, Chilled and Frozen Beef*, ¶ 133, WT/DS161/AB/R, WT/DS169/AB/R (Dec. 11, 2000). Border adjustments are regulations that affect the domestic sale of imported products as against like domestic products.

86. Panel Report, *United States – Standards for Reformulated and Conventional Gasoline*, ¶ 6.10, WT/DS2/R (Jan. 29, 1996) [hereinafter *US – Gas Panel Report*]. Here, the bills propose a national cap on domestic emissions while imposing a border adjustment on like imported products based on their embodied emissions. Under Article III:4, a “formally different treatment” is permissible “if that treatment results in maintaining conditions of competition for the imported product [that are] no less favourable than those of the like domestic product.” *Id.* ¶ 6.25. It is “the actual effects of the contested measure in the marketplace” that must be considered. Appellate Body Report, *United States – Tax Treatment for “Foreign Sales Corporations” (Recourse to Article 21.5 of the DSU by the European Communities)*, ¶ 215, WT/DS108/AB/RW (Jan. 14, 2002) (citation omitted).

87. *US – Gas Panel Report*, *supra* note 86, ¶ 6.10.

impacted the domestic sale of like products and granted U.S. producers a competitive advantage by permitting them to use individual baselines over an averaged national baseline. In essence, the panel required consistency: whether a national baseline or individual calculations are used, the measurement method should be applied consistently between like domestic and imported products.

Similarly, the disparity between the domestic regulatory structure and the border adjustment violates the National Treatment principle. Imported products are treated less favorably because they are denied the flexibility of a market mechanism to address embodied emissions. The United States can reduce actual emissions nationally by using a flexible market mechanism, the cap-and-trade program, without ever addressing the embodied emissions of its own products. At the same time, the border adjustment denies foreign firms the flexibility of a market mechanism and stringently accounts for the embodied emissions of imported products at the U.S. border. Therefore, the structure of the border adjustment distinguishes imported products in a way that affects their domestic sale and favors like domestic products, in violation of the National Treatment obligation of the GATT.

C. The Proposed Border Adjustments Violate the Most Favored Nation Principle

Trade measures violate the Most Favored Nation principle when *any* customs benefit is not extended to like products from *all* WTO members unconditionally.⁸⁸ Article I applies to discrimination in law and in fact.⁸⁹ The proposed border adjustments facially discriminate between otherwise-like products of different foreign nations by exempting products of least-developed nations and nations with *de minimis* emissions. Because this exemption—certainly a benefit—is not extended to all WTO members, the proposed border adjustments violate the Most Favored Nation obligations.

Even if the proposals for PPM-based border adjustments do not on their face discriminate based on national origin—that is, they are facially neutral—they, in fact, result in different treatment for like products from different foreign nations.⁹⁰ The allowance requirements will be

88. *Indonesia – Autos Panel Report*, *supra* note 79, ¶ 14.138. Any advantage accorded to *any* product must be granted to like products of all WTO members. Appellate Body Report, *Canada – Certain Measures Affecting the Automotive Industry*, ¶ 79, WT/DS139/AB/R, WT/DS142/AB/R (May 31, 2000) [hereinafter *Canada – Autos AB Report*].

89. *Canada – Autos AB Report*, *supra* note 88, ¶ 78.

90. Bordoff, *supra* note 5, at 15, 17.

determined according to a standard calculation and applied to all imported products uniformly.⁹¹ However, because the calculation takes into account country-specific factors, including a product's PPMs, it will result in differential treatment between imported like products from different foreign nations. This is impermissible because PPMs cannot be used to distinguish otherwise-like products.⁹² To comply with Most Favored Nation obligations, the lowest calculated border adjustment would have to be extended to all imported products.

Each of the proposed border adjustments violates the GATT non-discrimination principles by using PPMs to distinguish otherwise-like products. The scope and application of the proposed border adjustments also violates the National Treatment and Most Favored Nation principles. The border adjustments will comply under the GATT only if they successfully invoke one of the GATT's environmental exceptions (Article XX).⁹³

V. ARTICLE XX ENVIRONMENTAL EXCEPTIONS TO GATT OBLIGATIONS

If a border adjustment proposed in recent federal climate change legislation does not satisfy the requirements of the GATT, it still may be justified by the environmental exceptions under GATT Article XX.⁹⁴ WTO members recognize that a nation may need to regulate in violation of GATT obligations in order to protect important health, safety, or environmental interests.⁹⁵ Here, two main health and environmental exceptions may be applicable. They are:

91. For additional information on calculating allowance requirements, *see supra* notes 53-54 and accompanying text.

92. PPMs do not regulate a product as such and cannot distinguish otherwise-like products in order to apply border adjustments differently to foreign nations. *See supra* notes 81-84 and accompanying text.

93. Bordoff, *supra* note 5, at 11.

94. Appellate Body Report, *United States – Import Prohibition of Certain Shrimp and Shrimp Products*, ¶ 121, WT/DS58/AB/R (Oct. 12, 1998) [hereinafter *US – Shrimp AB Report*]; Appellate Body Report, *United States – Standards for Reformulated and Conventional Gasoline*, at 24, WT/DS2/AB/R (Apr. 29, 1996) [hereinafter *US – Gas AB Report*]; Pauwelyn, *supra* note 5, at 3.

95. *US – Gas AB Report*, *supra* note 94, at 29-30. “[I]t is within the authority of a WTO member to set the public health or environmental objectives it seeks to achieve, as well as the level of protection that it wants to obtain, through the measure or the policy it chooses to adopt.” Appellate Body Report, *Brazil – Measures Affecting Imports of Retreaded Tyres*, ¶ 140, WT/DS332/AB/R (Dec. 3, 2007) (citations omitted) [hereinafter *Brazil – Tyres AB Report*].

1. Measures “necessary to protect human, animal or plant life or health” (XX(b)); and
2. Measures “relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption” (XX(g)).⁹⁶

The analysis of environmental exceptions is two-tiered; a law must first fall under a specific exception and then satisfy the preamble (“chapeau”) requirements of Article XX.⁹⁷ The chapeau only permits environmental measures that “are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade.”⁹⁸ The burden to justify environmental measures falls to the party invoking the exception.⁹⁹

A. Article XX(b) Exception

To fall under exception XX(b), the border adjustment must be “*necessary* to protect human, animal or plant life or health.”¹⁰⁰ This requirement is fulfilled when 1) a measure furthers a policy “designed to protect human, animal or plant life or health” and 2) a measure is necessary to achieve the policy objective.¹⁰¹

A dispute panel first will examine whether the measure’s policy objective reduces a risk or threat to human, animal or plant life or health.¹⁰² Trade measures may be used to protect against local emission effects¹⁰³ and to tackle global environmental problems,¹⁰⁴ so it is not a

96. GATT, *supra* note 8, art. XX(b), (g).

97. *US – Gas AB Report*, *supra* note 94, at 22. Further, the order of analysis cannot be reversed. *US – Shrimp AB Report*, *supra* note 94, ¶¶ 119-20.

98. GATT, *supra* note 8, art. XX.

99. *US – Gas AB Report*, *supra* note 94, at 22-23.

100. GATT, *supra* note 8, art. XX(b) (emphasis added).

101. *US – Gas Panel Report*, *supra* note 86, ¶ 6.20; Panel Report, *European Communities – Measures Affecting Asbestos and Products Containing Asbestos*, ¶ 8.184, WT/DS135/R (Sept. 18, 2000); Panel Report, *European Communities – Conditions for the Granting of Tariff Preferences to Developing Countries*, ¶¶ 7.198-.199, WT/DS246/R (Dec. 1, 2003).

102. Panel Report, *Brazil – Measures Affecting Imports of Retreaded Tyres*, ¶ 7.43, WT/DS332/R (June 12, 2007). Given the international concern over climate change, a WTO dispute panel likely would find that a risk to life or health exists.

103. In *US-Gasoline*, a panel found that a measure protected human, animal and plant life or health by regulating the composition and *emission effects* of gasoline in order to address air pollution caused by the consumption of gasoline. *US – Gas Panel Report*, *supra* note 86, ¶ 6.21.

104. In *United States – Import Prohibition of Certain Shrimp and Shrimp Products*

stretch for a policy to reduce the effects of climate change by preventing emissions leakage. If its objective is to reduce global GHG emissions, prevent leakage, and slow the effects of climate change (both in the United States and globally), then the border adjustment serves to protect the life and health of humans, animals, and plants from the risks of climate change caused by GHG emissions. However, if the policy objective of the border adjustment is to address economic competitiveness concerns, the border adjustment will not qualify for the Article XX(b) exception.

The necessity of the measure is based on a “weighing and balancing” of 1) the importance of the interests protected by the measure, 2) the measure’s contribution to the achievement of its objective, and 3) the measure’s trade restrictiveness.¹⁰⁵ Again, if the border adjustments are intended to protect U.S. economic competitiveness, rather than human, animal, and plant life and health in the face of global climate change, the interests may not satisfy the importance factor for GATT’s Article XX(b) environmental exception.

The contribution factor is not a significant obstacle for a necessity finding. Any contribution that achieves the environmental policy objective or “a reduction of exposure to the targeted risks” is sufficient: an action may be necessary without being indispensable.¹⁰⁶ In *Brazil – Measures Affecting Imports of Retreaded Tyres*, the Panel held that if the actual accumulation of waste is “the very essence of the problem” and results in occurrence of the risks at issue, then “a reduction in this accumulation, even if it does not eliminate it, can reasonably be expected to constitute a step towards the reduction of the occurrence of” the risks at issue.¹⁰⁷ Here, the border adjustments address the accumulation of GHG emissions in the atmosphere, which is the very essence of the climate change problem and resulting risks. The border adjustment does

(“*US-Shrimp*”), the appellate body allowed U.S. trade measures to protect the lives of migratory sea turtles under the Article XX(g) environmental exception. *US – Shrimp AB Report*, *supra* note 94, ¶ 133; *see also* Frankel, *supra* note 17, at 9. Tackling global environmental problems under a policy goal of life and health protection (Article XX(b)) should receive the same favorable treatment as tackling global environmental problems to conserve exhaustible natural resources (Article XX(g)).

105. *Brazil – Tyres AB Report*, *supra* note 95, ¶ 176, 178. “[T]he contribution of the measure has to be weighed against its trade restrictiveness, taking into account the importance of the interests or the values underlying the objectives pursued by it.” *Id.* at ¶ 210.

106. *Id.* ¶¶ 149-50. An import ban must make a material contribution, not a “marginal or insignificant” contribution. *Id.* ¶ 210. Because a border adjustment is less trade restrictive, a lesser contribution to achieving emissions reductions will suffice.

107. *Id.* ¶ 136 (citations omitted).

contribute to the policy objective by reducing emissions, leakage, and the effects of climate change.

These two factors are balanced against the trade restrictiveness of a measure, which is determined by evaluating the proposed border adjustments against possible alternatives that are proposed by a complaining member.¹⁰⁸ If any alternative 1) is less trade restrictive than the border adjustment, 2) allows the United States to achieve the same level of protection desired, and 3) is “reasonably available,”¹⁰⁹ the proposed border adjustment will no longer be a necessary means to achieve the environmental objective.¹¹⁰ The WTO will keep in mind that “certain complex public health or environmental problems may be tackled only with a comprehensive policy comprising a multiplicity of interacting measures.”¹¹¹ According to U.S. lawmakers, the border adjustment is an essential part of a long-term comprehensive national GHG reduction program. The border adjustment would most likely be necessary— as a provision within a comprehensive program that helps prevent leakage—to achieve the policy goal under Article XX(b).

The border adjustment will qualify under the Article XX(b) exception if the policy goal it furthers relates to reducing emissions, preventing leakage, and addressing climate change in order to protect human, animal or plant life or health. However, as currently drafted, the provisions in the border adjustment primarily address economic competitiveness concerns and are ineffective to prevent leakage. Therefore, the currently drafted border adjustments will not qualify for the Article XX(b) exception. Section VI of this paper suggests several alterations to better qualify the proposed border adjustments for the environmental exceptions.

B. Article XX(g) Exception

Article XX(g) permits measures *relating to* the conservation of exhaustible natural resources, if enacted concurrently with domestic measures.¹¹² To qualify under exception XX(g), a border adjustment must 1) protect an exhaustible natural resource, 2) be primarily aimed at

108. *Brazil – Tyres AB Report*, *supra* note 95, ¶ 156.

109. *Id.* (citation omitted). A WTO panel determined that an alternative is reasonably available if the United States is capable of taking the alternative action without undue burdens, prohibitive costs, or substantial technical difficulties.

110. *Id.*

111. *Id.* ¶ 151. A dispute panel will consider whether “[s]ubstituting one element of [a] comprehensive policy . . . would weaken the policy by reducing the synergies between its components, as well as its total effect.” *Id.* ¶ 172.

112. GATT, *supra* note 8, art. XX(g).

the conservation of that resource, and 3) be enacted concurrently with domestic conservation measures.¹¹³

The proposed border adjustments protect exhaustible natural resources. A WTO Appellate Body, that hears appeals from reports issued during disputes brought by WTO members, held that the “exhaustible natural resources” determination should be dynamic and informed by the environmental “concerns of the community of nations,” and the WTO’s “objective of sustainable development.”¹¹⁴ In *United States-Gasoline*, clean air was declared an exhaustible natural resource, even though it is renewable.¹¹⁵ The atmospheric balance—in addition to preventing climate change impacts on sea level, species, biodiversity, or glacier formations—should also qualify as an exhaustible natural resource under exception XX(g).

The border adjustment directly relates to the protection and conservation of the atmosphere because it aims to reduce leakage, which could result in sustained or increased GHG emissions and harm to the atmosphere. Although the border adjustments primarily address economic competitiveness and are ineffective to prevent leakage, the effectiveness of a measure does not matter under Article XX(g).¹¹⁶ The proposed border adjustments provisionally qualify under Article XX(g) unless a WTO panel determines that protecting and conserving the atmosphere cannot be a measure’s secondary purpose.

Any exemptions or other differential treatment under the border adjustment must also directly relate to the policy goal. For instance, measures that exempt nations from coverage are permitted, if the exemptions “relate clearly and directly to the policy goal” of conserving

113. *US – Gas Panel Report*, *supra* note 86, ¶ 6.35. See generally *US – Shrimp AB Report*, *supra* note 94; HANDBOOK, *supra* note 77, at 30; POTTS, *supra* note 76, at 24.

114. *US – Shrimp AB Report*, *supra* note 94, ¶¶ 129, 131. The United Nations Framework Convention on Climate Change (“UNFCCC”) and Kyoto Protocol demonstrate international concern and action to address climate change and reduce emissions of GHGs. 192 nations have ratified the UNFCCC. The UNFCCC, Essential Background, http://unfccc.int/essential_background/convention/items/2627.php (last visited Oct. 10, 2009) (these members, including the United States, seek to reduce GHG emissions). 184 UNFCCC members have adopted and ratified the Kyoto Protocol, the first international agreement including mandatory GHG emission reductions for certain members. The UNFCCC, Kyoto Protocol, http://unfccc.int/kyoto_protocol/items/2830.php (last visited Oct. 10, 2009) (these members seek binding GHG emission reductions on developed nations). Action to address climate change also meets the WTO’s goal of sustainable development.

115. *US – Gas Panel Report*, *supra* note 86, ¶ 6.37; see also Bordoff, *supra* note 5, at 17.

116. Bordoff, *supra* note 5, at 18. Even though some studies suggest there will be little leakage and that border adjustments will not effectively address it, the measure will have the desired effect of reducing leakage. *Id.*

natural resources.¹¹⁷ Each U.S. proposal exempts nations certified as taking comparable action to reduce GHG emissions. These exemptions for comparable action will be permitted under XX(g) because they relate to the conservation policy goal.¹¹⁸

However, not all proposed exemptions relate to the conservation goal. This may lead a panel to determine that the overall aim of the border adjustment is economic, not environmental. Exempting nations with *de minimis* GHG emissions does not “clearly and directly” relate to the conservation policy goals of reducing GHG emissions and eliminating leakage.¹¹⁹ Similarly, four proposals exempt least developed countries from the border adjustment. The fact that a nation is a *de minimis* emitter or a least developed country does not mean there is no risk of emissions leakage and indicates that the United States is only concerned with potential economic competitiveness losses. Although the effectiveness of a measure is not relevant to a determination of whether it relates to the conservation goal,¹²⁰ creating exemptions like these *increases* the potential for emissions leakage and may destroy the ability of the United States to invoke the Article XX(g) exception in good faith.

The third requirement of the Article XX(g) exception is that a trade measure must be “made effective in conjunction with restrictions on domestic production or consumption.”¹²¹ This requirement is satisfied if the final regulation is even-handed “in the imposition of restrictions . . . upon the production or consumption of exhaustible natural resources.”¹²² In *United States – Import Prohibition of Certain Shrimp and Shrimp Products* (“*United States-Shrimp*”), the Appellate Body held that a product import ban based on harvesting methods was “effective in conjunction with the restrictions on domestic harvesting of shrimp.”¹²³ This is analogous to the proposed border adjustments, which charge a fee based on production methods (how the product is “harvested”) in

117. *US – Shrimp AB Report*, *supra* note 94, ¶ 138.

118. In *US-Shrimp*, the Appellate Body permitted the United States to require nations to adopt national regulation with comparable results or effects to qualify for the exemption. *Id.* ¶ 140.

119. In *US-Shrimp*, the Appellate Body permitted exemptions of nations with fishing environments that were determined and certified to pose “no risk, or only a negligible risk,” to sea turtles. *Id.* ¶ 139. However, emissions leakage is a sophisticated problem and can occur in many ways. *See supra* text accompanying notes 17-21. Any exemptions that could result in emissions leakage will be questioned by a WTO panel under an analysis regarding use of the environmental exception.

120. *See supra* note 116.

121. GATT, *supra* note 8, art XX(g).

122. *US – Shrimp AB Report*, *supra* note 94, ¶ 143, (citing *US – Gas AB Report*, *supra* note 94, pp. 20-21).

123. *Id.* ¶ 145.

conjunction with a cap on domestic GHG emissions (similar to regulating acceptable shrimping methods domestically). Both impose trade measures on imported *products* based on PPMs while *directly* regulating the dangerous activity (shrimp harvesting and GHG emissions) in the United States. Although the border adjustment is not the same regulation as the domestic reduction program, the WTO would likely find it to be even-handed and comparable.

The border adjustment relates to the conservation of exhaustible natural resources and will operate in conjunction with comprehensive domestic GHG emission regulations. However, unless the proposed border adjustments remove all exceptions or other provisions that do not further the environmental goal of the regulation, the border adjustments may not qualify for the Article XX(g) exception. Section VI of this paper suggests several alterations to better qualify the proposed border adjustments for the environmental exceptions.

C. Requirements of the Article XX Chapeau

In order to invoke an environmental exception, the border adjustment must also satisfy the chapeau requirements. The chapeau prevents abuse of the Article XX exceptions.¹²⁴ Analysis of a measure under the chapeau centers on whether the discriminatory “application of [a measure] had a legitimate cause or rationale in the light of the [environmental] objectives listed in the paragraphs of Article XX.”¹²⁵ Any discrimination in the application of the border adjustment must further the environmental goals of the regulation rather than protect U.S. industry against competitiveness impacts.¹²⁶

The chapeau prohibits the *application*¹²⁷ of a measure in a way that 1) constitutes arbitrary or unjustifiable discrimination between countries

124. “[T]he function of the chapeau is the prevention of abuse of the exceptions specified in the paragraphs of Article XX.” *Brazil – Tyres AB Report*, *supra* note 95, ¶ 224 (citations omitted); *see also US – Shrimp AB Report*, *supra* note 94, ¶ 116 (citation omitted).

125. *Brazil – Tyres AB Report*, *supra* note 95, ¶ 225 (citations omitted). The design of a measure is analyzed to determine if it falls within a paragraph of Article XX; the manner in which a measure is applied is analyzed to determine if it satisfies the requirements of the chapeau. *US – Shrimp AB Report*, *supra* note 94, ¶ 116.

126. Trade measures cannot be used to address domestic price or cost increases. Pauwelyn, *supra* note 5, at 26.

127. *US – Shrimp AB Report*, *supra* note 94, ¶ 120. (The chapeau by its express terms addresses the manner in which a measure is applied). “The provisions of the chapeau cannot logically refer to the same [discrimination] standard(s) by which a violation of a substantive rule has been determined to have occurred. To proceed down that path would be both to empty the chapeau of its contents and to deprive the

where the same conditions prevail, or 2) constitutes a disguised restriction on international trade.¹²⁸ Discrimination between countries where the same conditions prevail refers to either discrimination between exporting nations or between an exporting nation and an importing nation.¹²⁹

Discriminatory application under the chapeau is different from the discrimination found to violate GATT Article I and III obligations.¹³⁰ For discrimination to exist under the chapeau, it “must have been foreseen. . . not merely inadvertent or unavoidable.”¹³¹ For example, the proposed border adjustments foreseeably may discriminate between foreign nations by entirely exempting certain nations from regulation in a way that does not further the measure’s goal. Discrimination between the United States and a foreign nation foreseeably may occur under the chapeau if the international reserve allowances are priced differently than domestic allowances.

Assuming that discriminatory treatment between exporting nations or between the United States and an exporting nation could be foreseen, the discriminatory application of the border adjustment must still be arbitrary or unjustifiable. The WTO has not articulated a specific test for arbitrary or unjustifiable discrimination. However, examples given in previous decisions indicate that a trade measure must generally 1) be flexible, 2) provide similar opportunities to all members, and 3) be implemented only after an attempt at international negotiation in order to survive the chapeau requirements.¹³²

exceptions in paragraphs (a) to (j) of meaning.” *US – Gas AB Report, supra* note 94, at 23.

128. *US – Shrimp AB Report, supra* note 94, ¶ 150. The WTO considers factors for a *disguised restriction on international trade* finding to be similar to those expressed for *arbitrary or unjustifiable discrimination* because the “fundamental theme is to be found in the purpose and object of avoiding abuse or illegitimate use of the exceptions to substantive rules.” *US – Gas AB Report, supra* note 94, at 25, 28-29 (“[T]he kinds of considerations pertinent in deciding whether the application of a particular measure amounts to ‘arbitrary or unjustifiable discrimination’, may also be taken into account in determining the presence of a ‘disguised restriction’ on international trade”). This paper does not separately analyze whether the border adjustment is a disguised restriction on international trade.

129. *US – Gas AB Report, supra* note 94, at 23-24.

130. *US – Shrimp AB Report, supra* note 94, ¶ 150.

131. *US – Gas AB Report, supra* note 94, at 28.

132. *US – Shrimp AB Report, supra* note 94, ¶¶ 166, 172; Appellate Body Report, *United States – Import Prohibition of Certain Shrimp and Shrimp Products (Recourse to Article 21.5 of the DSU by Malaysia)*, ¶¶ 139, 143, WT/DS58/AB/RW (Oct. 22, 2001) [hereinafter *US – Shrimp Recourse AB Report*].

1. Flexibility

Border adjustments may condition domestic market access on compliance with “policies unilaterally prescribed by the importing Member,”¹³³ if there is flexibility in the application of the unilateral measures.¹³⁴ The WTO Appellate Body held that requiring exporting nations to adopt *essentially the same* practices and procedures is arbitrary or unjustifiable discrimination.¹³⁵ However, the United States may require exporting nations to adopt regulatory programs *comparable in effectiveness* to U.S. domestic regulation.¹³⁶ Requiring regulations to be comparable in effectiveness provides flexibility to exporting nations and accounts for specific conditions prevailing in foreign nations.¹³⁷ Compliance with this guideline depends on how a border adjustment is implemented, but generally, any foreign climate program comparable in effectiveness should be exempt.

2. Similar Opportunities

The WTO Appellate Body also required trade measures to provide similar opportunities to all members. Any border adjustment must provide each nation with similar amounts of time to implement comparable action, similar opportunities for technology transfer and assistance, and similar opportunities for certification or exemption.¹³⁸ Certification procedures, whether for a comparable action or national

133. *US – Shrimp AB Report*, *supra* note 94, ¶ 121. “Paragraphs (a) to (j) comprise measures that are recognized as *exceptions to substantive obligations* established in the GATT 1994, because the domestic policies embodied in such measures have been recognized as important and legitimate in character.” *Id.* (emphasis in original). A balance must be struck between the *right* of a Member to invoke an exception under Article XX and the *duty* of that same Member to respect the treaty rights of the other Members. *Id.* ¶ 156.

134. *US – Shrimp Recourse AB Report*, *supra* note 132, ¶¶ 139, 143.

135. *Id.* ¶¶ 143-44. Even if the border adjustments were “designed to influence countries to adopt national regulatory programs,” they are permitted as long as they do not require essentially the same policy. *US – Shrimp AB Report*, *supra* note 94, ¶ 138. The Appellate Body permits a nation to require exporting nations to implement regulatory measures of comparable effectiveness as long as it does not require essentially the same policy. *Id.* ¶ 161.

136. *US – Shrimp Recourse AB Report*, *supra* note 132, ¶¶ 143-44.

137. *Id.* ¶ 144. The United States does not need to account “explicitly for the specific conditions prevailing” in each exporting nation; requiring regulations comparable in effectiveness allows exporting nations to account for their own prevailing conditions. *Id.* ¶¶ 145, 149; *see also US – Shrimp AB Report*, *supra* note 94, ¶¶ 164-65; Pauwelyn, *supra* note 5, at 3. This may include exempting nations that take comparable action from the border adjustments. *See* Climate Security Act of 2008 § 6006(d)(2)(B)(ii); Climate MATTERS Act § 111(e)(5); I-CAP Act § 765(d)(2)(B).

138. *US – Shrimp AB Report*, *supra* note 94, ¶¶ 172-75.

baseline determination, cannot be an administrative *ex parte* process.¹³⁹ The chapeau requires a “transparent, predictable certification process,” including an opportunity to be heard and to respond, a “formal written, reasoned decision,” notification of approval or denial, and a procedure for review or appeal of a denial of certification.¹⁴⁰ Again, compliance with this requirement will depend on how Congressional guidelines are promulgated.

3. *Duty to Conduct International Negotiations*

To avoid unjustifiable or arbitrary discrimination, the Appellate Body requires an implementing nation to conduct international negotiations pursuing similar and comparable efforts between all participants.¹⁴¹ *United States-Shrimp* implies a duty to engage in international negotiations to address an environmental problem before enacting unilateral trade measures.¹⁴² The *United States-Shrimp* Appellate Body implied that nations should engage in “serious, across-the-board negotiations” to further the environmental policy goal.¹⁴³ The negotiations or results “need not be identical” but a nation should invest comparable efforts, resources, and energies among all participating nations when seeking a multilateral solution.¹⁴⁴ Although the duty to negotiate with other nations continues after implementing unilateral measures, a nation must only *conduct* international negotiations, not conclude agreements with all exporters.¹⁴⁵

The Appellate Body in *United States-Shrimp* only required international negotiations concerning the general environmental problem, not negotiations concerning specific unilateral measures.¹⁴⁶ While the United States has not conducted negotiations on border adjustments,¹⁴⁷ it

139. *Id.* ¶ 180.

140. *Id.* Administration of trade measures should conform to “minimum standards for transparency and procedural fairness” even when being applied as an environmental exception under GATT Article XX. *Id.* ¶ 183; *see also* POTTS, *supra* note 76, at 26 (on how to avoid arbitrary application in a measure).

141. *US – Shrimp AB Report*, *supra* note 94, ¶ 166. Arbitrary or unjustifiable discrimination occurs if the United States provides WTO members with different opportunities to negotiate international agreements. *US – Shrimp Recourse AB Report*, *supra* note 132, ¶ 119. In *United States-Shrimp*, the United States cooperated with some nations, resulting in a multilateral agreement, but did not attempt to negotiate an agreement with other exporting nations. *Id.*

142. POTTS, *supra* note 76, at 26.

143. *US – Shrimp AB Report*, *supra* note 94, ¶ 166, 170-72.

144. *US – Shrimp Recourse AB Report*, *supra* note 132, ¶ 122.

145. *Id.* ¶ 123.

146. *See US – Shrimp AB Report*, *supra* note 94, ¶ 166.

147. In fact, until the United States considered employing its own border

has continued serious, good faith, across-the-board negotiations within the United Nations Framework Convention on Climate Change (“UNFCCC”) to secure binding reduction commitments from a higher number of participants in order to address leakage in any international reduction scheme.

Although the United States rejected the Kyoto approach, it continued to address emissions reductions and leakage by forming a major emitters program to secure voluntary emission reductions from the highest-emitting nations.¹⁴⁸ The United States has attempted to negotiate both emissions reductions and leakage in the past and is renewing its commitment by seeking to pass comprehensive climate change legislation. In addition, most of the previously addressed proposals delay border adjustments to allow for additional time for international negotiations.

As long as any discriminatory application in the border adjustment furthers the environmental policy objectives of reducing emissions and eliminating leakage, the border adjustment may qualify for one of the environmental exceptions. The proposed border adjustments could be altered to satisfy the requirements of Articles XX(b) and XX(g) by eliminating protectionist provisions. Although the border adjustment may be discriminatorily applied, it likely meets the flexibility, similar opportunity, and international negotiation guidelines of the Appellate Body. The next section presents several opportunities to improve the border adjustment’s chance of meeting the requirements of the environmental exceptions.

VI. PROPOSED SOLUTIONS

PPM-based measures violate the GATT non-discrimination requirements because this type of regulation distinguishes between otherwise like products from different exporting nations based on their embodied emissions. Invoking an environmental exception is the only way for the border adjustment to be GATT-compliant. If the border adjustment can qualify for an environmental exception, it may be able to distinguish products based on their PPMs and resulting emissions.¹⁴⁹

adjustments for economic competitiveness purposes, it criticized the proposed use of border adjustments by other nations. Janzen, *supra* note 5, at 22, 24; PEW CONGRESSIONAL POLICY BRIEF, *supra* note 5, at 9.

148. Richard Harris, ‘Major Emitters’ Meet to Tackle Climate Change, (N.P.R. radio broadcast Apr. 27, 2009), available at <http://www.npr.org/templates/story/story.php?storyId=103465542>.

149. See generally *US – Shrimp AB Report*, *supra* note 94; Frankel, *supra* note 17, at 8.

However, invoking an environmental exception is not an easy task. This section proposes some changes that may improve the chances of success for the type of border adjustment U.S. lawmakers seek to enact.

A. Improving the Proposed Border Adjustment's Chance for Success Under Article XX

To successfully invoke the environmental exceptions, the border adjustment must have an environmental purpose, objective, and effect, rather than provisions meant to address economic competitiveness concerns. The requirements of Article XX(b), XX(g), and the chapeau specifically require both the text and application of the border adjustment, as well as any deviations from a party's GATT principles, to be primarily and clearly aimed at, or directly related to, the environmental policy objective.¹⁵⁰

Many provisions of the current bills in U.S. Congress are written to address economic competitiveness concerns. Congress should rework these provisions to focus on preventing emissions leakage in order to better qualify for the GATT's environmental exceptions. Congress should at least revisit which nations and products are subject to the border adjustment and the pricing and calculation of the international reserve allowance requirements.

1. Nations Subject to the Border Adjustment

Because a border adjustment based on PPMs already violates the non-discrimination principles, lawmakers should take care to treat all exporting nations equally elsewhere in the regulation. Initially, all nations should be subject to the border adjustment. Limiting border adjustments to WTO trading partners does not further the environmental goal of reducing global emissions and preventing leakage.¹⁵¹

Exemptions from the border adjustment should also further the environmental goals of reducing net global emissions and preventing emissions leakage. Exemptions for *de minimis* emitters or least developed nations cannot be maintained because they are not related to preventing emissions leakage. If nations that enter into separate

150. See *supra* text accompanying notes 101, 109-10, 113, 117, 125-26. Further, the WTO prevents the use of trade measures to address domestic price or cost increases, which is the same as addressing competitiveness concerns. Pauwelyn, *supra* note 5, at 26.

151. See *supra* section III(B)(1). Although this ensures all WTO participants are initially subject to border adjustments, it demonstrates a lack of good faith in trying to prevent emissions leakage to unregulated nations.

agreements with the United States are exempted, the separate agreements should address comparable GHG reductions and leakage prevention.

U.S. border adjustments still may exempt nations that take comparable action to reduce emissions and prevent leakage because this exemption furthers the environmental policy goals.¹⁵² If the United States continues to use this exemption, it must follow the GATT guidelines when determining which nations have taken comparable action to the United States. The *United States-Shrimp* Appellate Body implied that *any* climate change action that achieves comparable results or effectiveness could exempt a nation from the border adjustments; the United States cannot dictate the approach another nation uses to achieve these reductions.¹⁵³ The United States may not exempt only nations with market mechanisms or nations with binding emissions targets.¹⁵⁴ Further, the United States should consider all national programs to address climate change, whether the nation is in compliance with an international program, and maybe even how the nation compares to the United States regarding historical emissions or current per capita emissions.¹⁵⁵

2. *Goods Subject to the Border Adjustment*

Imposing a border adjustment on all products would theoretically prevent any leakage. However, this is administratively and monetarily prohibitive. Most U.S. proposals enact a border adjustment on primary products, raw materials and bulk goods intended for further manufacture, in order to prevent leakage in the most energy-intensive industries. One proposal also regulates manufactured goods meant for consumption that have greater embodied emissions.¹⁵⁶ Instead of using a maximum or most effective leakage prevention goal, this second regulatory method determines additional goods subject to border adjustments on the basis of whether domestic production could be harmed.¹⁵⁷ This would likely prevent the United States from invoking an environmental exception.

152. *See supra* text accompanying notes 125-26.

153. In *US-Shrimp*, the Appellate Body only permitted the United States to require nations to adopt national regulation with comparable results or effects. *US – Shrimp AB Report, supra* note 94, ¶ 140.

154. Bordoff, *supra* note 5, at 21-22.

155. *Id.*

156. Climate MATTERS Act § 101(9). The ACES Act may also regulate goods manufactured for consumption. Again, the ACES Act determination is more complicated. *See* ACES Act §§ 762,763.

157. Climate MATTERS Act § 101(9); ACES Act §§ 762,763.

Primary products encompass the most energy intensive products and largest GHG emissions for U.S. manufactured goods,¹⁵⁸ so it is the most effective place to draw the regulatory line. It also reduces the administrative and monetary requirements of the border adjustment because the embodied emissions of raw materials and bulk goods are more easily identifiable.¹⁵⁹ Although this line also addresses general competitiveness concerns, it will prevent the greatest amount of leakage in the most effective and transparent way. Absent an international agreement that addresses the problems of leakage, there likely is not a “reasonable alternative” available that is less trade restrictive.

3. The Price of the International Reserve Allowances

U.S. lawmakers should guard against foreseeable arbitrary and unjustified discrimination between the United States and any importing nation by capping the price of international reserve allowances at the current price of domestic allowances.¹⁶⁰ If the purpose of the border adjustment is to reflect the costs of domestic climate change regulation in imported products (to prevent leakage), then the international allowance price must match current market prices for domestic allowances. Any other calculation would result in a discriminatory application or protectionist finding.

In addition, any domestic transitional assistance, from sector exemptions and free allocation to banking and borrowing should be extended to foreign producers.¹⁶¹ The United States cannot charge imported products for embodied emissions if it exempts processes that manufacture like domestic products from the emissions cap. If the imported product is not fully exempted, the benefits provided to the like domestic products can be valued and deducted from the price of the international reserve allowances. As between the national cap-and-trade program and the border adjustment scheme, any distinctions that may favor domestic products (or production) should be extended to imported products or reflected in the international allowance requirement calculation.

158. For a more extensive emissions analysis, *see* HOUSER, *supra* note 5.

159. *See supra* note 62.

160. *See supra* text accompanying notes 128-29 and section III(B)(3).

161. *See supra* text accompanying notes 85-87, 128-29. For example, when domestic industrial sectors receive emission allowance rebates, the ACES Act directs the administrator to reduce the international allowance requirements by an equivalent amount. ACES Act § 768(b).

4. *Calculating the International Reserve Allowance Requirements*

A climate change border adjustment will be based on the amount of GHG emissions occurring during the manufacture of the product. Recent bills propose calculating separate emission baselines for each type of product coming from each different nation. However, national baselines for products may lead to discriminatory application problems.¹⁶² National baselines are not flexible and provide no incentive for firms to improve efficiencies, reduce leakage or lower emissions.¹⁶³ The current method of calculating the border adjustment prevents leakage only if U.S. firms moving abroad must export products back to the United States. In reality, the global market will shift: the United States will receive products from nations with lower emissions and U.S. firms may still leave to supply primary products to other nations.¹⁶⁴

The border adjustment can only further the environmental objective of lower emissions and reduced leakage if it addresses actual emissions.¹⁶⁵ A default national emissions baseline may be acceptable where no data is available, but the border adjustment should permit individual firms to submit their actual emission figures.¹⁶⁶ However, this results in a unique embodied emissions calculation for each individual product from each nation, which is administratively prohibitive. In crafting this provision, the United States must ensure it does not shift its administrative burdens to other nations, individual firms, or factories. Unilaterally shifting one's own administrative difficulties (like formulating or verifying individual figures) has already been found to be unjustifiable discrimination.¹⁶⁷

To qualify the proposed border adjustments for GATT's environmental exceptions, restructuring is required. This restructuring, including the above suggestions, will result in a regulatory program that is administratively complex and costly. The United States may be better

162. Emissions calculations set for an entire nation and incorporating a broad swath of that nation's exports may be seen as a sanction. Frankel, *supra* note 17, at 15. Also, using national baselines for imports while calculating allowance requirements domestically based on a facility's actual emissions violates the National Treatment principle. Bordoff, *supra* note 5, at 15, 17. Structuring a border adjustment to operate like this may be found to discriminate based on national origin, especially if the purpose of the border adjustment is to address the actual embodied emissions of a product.

163. Bordoff, *supra* note 5, at 21.

164. ISSUES IN PERSPECTIVE, *supra* note 6, at 25-26.

165. *Id.* at 24; Bordoff, *supra* note 5, at 21.

166. A WTO panel suggested that a standard baseline may be appropriate if an absence of data exists. *US – Gas Panel Report*, *supra* note 86, ¶ 6.28; *see also* Bordoff, *supra* note 5, at 13, 21.

167. *US – Gas AB Report*, *supra* note 94, at 28-29.

off using other channels to legitimize PPM border adjustments or other methods to address competitiveness and leakage concerns.

B. Legitimizing PPM Border Adjustments for Climate Change Regulations

Although only general climate change negotiations are required under *United States-Shrimp* to utilize border adjustments under GATT's environmental exceptions, the United States should initiate international negotiations specifically concerning the use of PPM measures in climate change regulation. This action could either legitimize the use of PPM trade measures outside of the environmental exceptions or establish a basis to later implement unilateral PPM border adjustments under the Article XX exceptions.

International negotiations for the next UNFCCC protocol should explore the use of embodied carbon regulations to battle the problem of emissions leakage and to further reduce GHG emissions. Border adjustments based on PPMs would be more appropriate if a multilateral agreement established their legitimacy and "guidelines for their design."¹⁶⁸ Measures could be permitted in nations that are complying with the UNFCCC protocol obligations against nations that are not in compliance or refuse to join the protocol.¹⁶⁹ Previously, the Montreal Protocol specifically addressed leakage and permitted controls to minimize "the migration of production of banned substances to nonparticipating countries."¹⁷⁰

If the United States cannot establish the legitimacy of PPM climate change regulations in an international agreement, it may still improve the legitimacy of unilateral border adjustments. Good faith negotiation efforts to establish PPM measures to reduce leakage will help the United States satisfy the *United States-Shrimp* chapeau requirement to conduct international negotiations.¹⁷¹ If a climate change PPM border adjustment qualifies for an environmental exception, is flexible and even handed in application, and is enacted after good faith international negotiations—even if they are not concluded—it may rely on the environmental exceptions of the GATT. The United States should begin preliminary international negotiations regarding PPM border adjustments to address leakage immediately to support its use of the measures.

168. Frankel, *supra* note 17, at 10.

169. *Id.* at 15.

170. *Id.* at 9.

171. *See supra* section V(C)(3).

*C. Establishing International Sectoral Agreements to Bypass
Border Adjustments*

One promising alternative to border adjustments is establishing international agreements for each exposed energy-intensive industrial sector. The agreements would address emissions reduction, leakage, and competitiveness concerns between all major trading partners in a specific industry.¹⁷² With support from developed nations, there may be opportunities to negotiate and conclude these smaller climate change agreements more rapidly than other international negotiations. This method permits nations to address energy-intensive products in a uniform manner. The agreements also may establish authority and guidelines for PPM border adjustments that can be applied to products from nations that are not part of the agreement or are not in conformance.

However, it is unlikely that merely conducting these negotiations could authorize unilateral border adjustments in a WTO dispute so parties must work to conclude the agreements. It would be wise for parties to plan to incorporate these agreements over time into the broader climate change treaties and protocols in order to avoid conflict and confusion.¹⁷³

VII. CONCLUSION

The United States proposes to enact a border adjustment that reflects the costs of a domestic climate change regulation in imported products. While the border adjustment is meant to avoid competitiveness impacts and emissions leakage, it may also backfire and lead to retaliatory trade measures, WTO challenges, and abuse by industry and politicians.¹⁷⁴ In addition, the costs of border adjustments are expected to outweigh the benefits.¹⁷⁵

As seen above, a border adjustment based on a PPM would violate the non-discrimination principles of the GATT. This measure could only survive a dispute in the WTO if justified by one of the environmental exceptions in GATT Article XX. While success under the exceptions is rare, a border adjustment that is primarily aimed at the environmental objective of preventing emissions leakage to address climate change may qualify for the Article XX(b) or (g) exceptions. If the United States

172. PEW CONGRESSIONAL POLICY BRIEF, *supra* note 5, at 9. *See generally* HOUSER, *supra* note 5.

173. PEW CONGRESSIONAL POLICY BRIEF, *supra* note 5, at 9.

174. Bordoff, *supra* note 5, at 2.

175. *Id.*

attempts international good faith negotiations to address climate change and leakage, and the border adjustment is applied in a manner that is flexible, even handed, objective, and transparent, then the measure may also satisfy the requirements of the Article XX chapeau.

This paper raised several red flags to recent border adjustment proposals. To improve the chance that a border adjustment can rely on an environmental exception, lawmakers should systematically rework the legislation to target environmental goals, preventing leakage, and not competitiveness fears. Any provision in the border adjustment that is inconsistent with the GATT obligations must relate to the environmental goal in order to qualify for an environmental exception. Provisions should not be applied in a discriminatory manner. The use of an exception does not permit a nation to abuse the exception or violate another member's treaty rights. Lastly, lawmakers should provide for individual emission calculations when determining international reserve allowance requirements. This method of allowance calculation is more aligned with the non-discrimination principles, the prevention of leakage, and the use of an embodied emission benchmark for imported products.

Drafting a border adjustment mechanism that is GATT-compliant and still effective will be extremely difficult. Environmental leakage will only occur as a result of economic competitiveness losses, which are also uncertain and limited to six U.S. industries. A legitimate border adjustment will be administratively complex and expensive. It will increase the costs of already scarce resources for U.S. manufacturers, impede liberalization and expansion of world trade in goods, and could result in retaliatory tariffs or legal challenges in the WTO.

Before approving comprehensive climate change legislation that includes a border adjustment, Congress should reevaluate whether economic competitiveness and emissions leakage are worth addressing. If they are, Congress should initially explore other channels, ideally within the existing international framework established to address climate change concerns. The next UNFCCC protocol and international sectoral agreements between major trading partners may be the more effective and promising ways to address competitiveness and leakage concerns.

Missing the 2010 Biodiversity Target: A Wake-up Call for the Convention on Biodiversity?

Rachelle Adam*

ABSTRACT

In the countdown to the 2010 global biodiversity target, this Article will explore the apparent failure of the Convention on Biological Diversity (“CBD”) to stop biodiversity loss. The starting point will be the United Nations Environmental Programme’s position that noncompliance with multilateral environmental agreements is the cause of environmental degradation. In the context of the CBD, it will argue that poor compliance is not a cause of biodiversity loss, but rather an indicator of the lack of global consensus on the critical need to protect it, resulting in a weak and ineffective agreement perceived as lacking legitimacy. Thus, a multilateral agreement is perhaps not the appropriate legal tool for stemming biodiversity loss and, in light of the ongoing crisis, alternatives must be found.

I. INTRODUCTION

Chosen by the international community as the principal means for addressing ongoing global environmental degradation and destruction, international environmental law serves as the framework in which states have adopted multilateral environmental agreements (“MEAs”)¹ to solve

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global environmental problems.² Over the past decade, this system has come under increased criticism for weakness and inadequacy, while the perceived failure of MEAs to solve environmental problems has been linked to deficient implementation and compliance.³ A recent United

observations, particularly on the Barcelona Convention, and my doctoral adviser, Professor Tomer Broudie for his insightful comments that allowed me to “dig deeper” in understanding why the CBD has not stopped biodiversity loss.

1. U.N. ENV'T PROGRAMME, MANUAL ON COMPLIANCE WITH AND ENFORCEMENT OF MULTILATERAL ENVIRONMENTAL AGREEMENTS 51 (2006) [hereinafter MANUAL], available at http://www.unep.org/dec/MEA_Manual.html (“The term ‘Multilateral Environmental Agreement’ or MEA is a broad term that relates to any of a number of legally binding international instruments through which national Governments commit to achieving specific environmental goals.”). The terms “MEA,” “treaty,” “convention,” and “agreement” will be used interchangeably throughout this Article, connoting an international environmental agreement.

2. See JAMES GUSTAVE SPETH, RED SKY AT MORNING 91 (Nota Bene ed. 2005) [hereinafter RED SKY AT MORNING] (“The principal response of the international community to global-scale environmental challenges to date has been a legal one.”). See also JAMES GUSTAVE SPETH & PETER M. HAAS, GLOBAL ENVIRONMENTAL GOVERNANCE 82 (2006); ENGAGING COUNTRIES: STRENGTHENING COMPLIANCE WITH INTERNATIONAL ENVIRONMENTAL ACCORDS 511 (Edith Brown Weiss & Harold K. Jacobson eds., MIT Press paperback ed. 2000) [hereinafter ENVIRONMENTAL ACCORDS] (“In a world of sovereign states, international accords are the traditional . . . instruments for dealing with common problems.”); THE IMPLEMENTATION AND EFFECTIVENESS OF INTERNATIONAL ENVIRONMENTAL COMMITMENTS 1 (David G. Victor et al. eds., 1998) (“In nearly every case, states have organized their responses to transboundary environmental problems via international agreements.”); James Gustave Speth, *International Environmental Law: Can it Deal with the Big Issues?*, 28 VT. L. REV. 779 (2004).

3. See ENVIRONMENTAL ACCORDS, *supra* note 2, at 511 (internal citation omitted) (“By the time of the 1992 United Nations Conference on the Environment and Development the implementation of and compliance with international environmental accords had become such a salient issue that a study of the enforcement of international environmental agreements was commissioned as part of the preparatory work for the conference.”). See also SPETH & HAAS, *supra* note 2, at 76 (“In the run-up to what became the World Summit for Sustainable Development (“WSSD”) . . . almost everyone accepted the proposition that the Rio agreements had not been effectively implemented . . . For many, therefore, WSSD was to be about implementation.”); U.N. Dep’t of Econ. & Soc. Affairs, *Plan of Implementation of the World Summit on Sustainable Development* [hereinafter WSSD], paras. 81–136, available at http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/WSSD_PlanImpl.pdf (describing the means of implementation of Agenda 21, the global program designed to achieve sustainable development); Jeffrey L. Dunoff, *From Green to Global: Toward the Transformation of International Environmental Law*, 19 HARV. ENVTL. L. REV. 241, 271 (1995) (discussing that there is a lack of implementation of MEAs because “incentives sufficient to ensure compliance do not always exist . . . [E]ven where the treaty has enforcement mechanisms, they are often weak and difficult to use when monitoring.”); Maria Ivanova & Jennifer Roy, *The Architecture of Global Environmental Governance: Pros and Cons of Multiplicity*, in GLOBAL ENVIRONMENTAL GOVERNANCE: PERSPECTIVES ON THE CURRENT DEBATE 48 (Lydia Swart & Estelle Perry eds., 2007), available at <http://www.centerforunreform.org/node/251> (discussing the heavy burden of

Nations Environmental Programme (“UNEP”) information document from December 29, 2007, prepared for the twenty-fourth session of UNEP’s Governing Council, entitled “Compliance with and Enforcement of Multilateral Environmental Agreements,”⁴ asserts that “[t]he failure to implement and enforce MEAs and, thereby, to ensure their effectiveness is a leading cause of the continued degradation and endangerment of the global environment.”⁵

In light of UNEP’s dominant position in the structure of global environmental governance, the above assertion has critical international policy implications for ongoing environmental degradation. Since its creation in 1972, UNEP has consistently promoted international environmental law as one of its leading mechanisms for addressing the range of environmental problems and concerns under its charge,⁶ furthering the adoption of a substantial number of MEAs, which it also administers.⁷ In response to accusations of ineffectiveness, UNEP designed a strategy for strengthening compliance and enforcement of multilateral environmental agreements, comprised of three major initiatives:⁸ (1) the publication of the 2002 “Guidelines on Compliance with and Enforcement of Multilateral Environmental Agreements,”⁹ followed in 2006 by the “Manual on Compliance with and Enforcement of Multilateral Environmental Agreements”;¹⁰ (2) extensive capacity

implementing and enforcing MEAs); *infra* note 13.

4. U.N. Env’t Programme [UNEP], Governing Council, *Compliance with and Enforcement of Multilateral Environmental Agreements*, U.N. Doc. UNEP/GC/24/INF/23 (Dec. 29, 2007) [hereinafter UNEP document].

5. *Id.* at para. 25.

6. U.N. Env’t Programme, About the Programme, http://www.unep.org/law/About_prog/introduction.asp (last visited Sept. 25, 2009) (“Since its establishment, environmental law has been one of the priority areas of UNEP, in line with the mandate accorded by the UN General Assembly Resolution 2997 (XXVII) and subsequent decisions of the Governing Council of UNEP. UNEP’s Environmental Law activities are carried out within the framework of strategic Programmes for the Development and Periodic Review of Environmental Law (The Montevideo Programmes) approved by the Governing Council every ten years.”).

7. See U.N. ENV’T PROGRAMME, ORGANIZATION PROFILE 21, available at http://www.unep.org/PDF/UNEP_OrganizationProfile.pdf (providing a review of the MEAs under the administration of UNEP); Alexandre Timoshenko, *Enhancing Compliance with International Environmental Obligations*, in ECONOMIC GLOBALIZATION AND COMPLIANCE WITH INTERNATIONAL ENVIRONMENTAL AGREEMENTS 125, 126–34 (Alexandre Kiss et al. eds., 2003) (providing a general review of UNEP’s work on issues of MEA implementation).

8. UNEP document, *supra* note 4, at paras. 10–14.

9. U.N. Env’t Programme, *Guidelines on Compliance with and Enforcement of Multilateral Environmental Agreements*, <http://www.unep.org/DEC/docs/UNEP.Guidelines.on.Compliance.MEA.pdf> [hereinafter *Guidelines*].

10. MANUAL, *supra* note 1.

building activities/focusing on distinct categories of stakeholders; and (3) the “Colombo Process on Compliance with and Enforcement of Multilateral Environmental Agreements,” comprised of experts together with representatives of government, non-governmental organizations, and civil society.

Using the UNEP document as the springboard for discussion, this Article will explore the implementation of, and compliance with, the Convention on Biological Diversity (“CBD”)¹¹ in the present reality of severe biodiversity loss.¹² Mounting and overwhelming evidence of worsening biodiversity loss, despite the CBD and other MEAs,¹³ led to the 2002 decision by the Conference of the Parties to the CBD to declare 2010 as the target date for reversing biodiversity loss,¹⁴ followed by a

11. U.N. Convention on Biological Diversity, June 5, 1992, 1760 U.N.T.S. 142 [hereinafter CBD], available at <http://www.cbd.int/convention/convention.shtml>.

12. See *infra* text accompanying note 35 (defining biodiversity loss).

13. See John Charles Kunich, *Losing Nemo: The Mass Extinction Now Threatening the World's Hotspots*, 30 COLUM. J. ENVTL. L. 1, 9 (2005) (“I have established the dearth of effective legal protection for the planet’s terrestrial biodiversity Even the best of international treaties has failed to make a discernible dent in the appalling loss of key habitats.”); Dunoff, *supra* note 3, at 270 (“The proliferation and increasing sophistication of international legal instruments . . . might suggest that we are well on our way to solving many of the planet’s most serious ecological problems Rather . . . the environmental situation in the world became worse and is deteriorating further.”). See also Desiree McGraw, *The Story of the Biodiversity Convention: from Negotiation to Implementation*, in GOVERNING GLOBAL BIODIVERSITY 7, 9 (Philippe G. Le Prestre ed., 2002) (“There are at present over 300 . . . MEAs. Of these, approximately 30 percent address biodiversity either in full or in part.”); Lakshman D. Guruswamy, *The Convention on Biological Diversity: A Polemic*, in PROTECTION OF GLOBAL BIODIVERSITY 351, 351 (Lakshman Guruswamy & Jeffery A. McNeely eds., 1998) [hereinafter Guruswamy]; International Institute for Sustainable Development, *CBD COP 9 Highlights*, EARTH NEGOTIATIONS BULLETIN, May 20, 2008, available at <http://www.iisd.ca/download/pdf/enb09443e.pdf> (“In a video message, Achim Steiner, UNEP Executive Director, noted that existing international environmental governance arrangements have not been effective in addressing the biodiversity crisis.”); Chris Wold, *The Futility, Utility and Future of the Biodiversity Convention*, 9 COLO. J. INT’L ENVTL. L. & POL’Y 1 (1998). For other major biodiversity MEAs see U.N. Convention on the Conservation of Migratory Species of Wild Animals [hereinafter CMS], June 23, 1979, 19 I.L.M. 15; U.N. Convention on International Trade in Endangered Species of Wild Fauna and Flora, Mar. 3, 1973, 993 U.N.T.S. 243 [hereinafter CITES]; U.N. Convention Concerning the Protection of World Cultural and Natural Heritage, Nov. 23, 1972, 1037 U.N.T.S. 151; and U.N. Convention on Wetlands of International Importance Especially as Waterfowl Habitat, Feb. 2, 1971, 996 U.N.T.S. 245 [hereinafter the Ramsar Convention].

14. Conference of the Parties to the Convention on Biological Diversity, The Hague, Neth., Apr. 7–19, 2002, *Report of the Sixth Meeting of the Conference of the Parties to the Convention on Biological Diversity*, Decision VI/26 para. 11, U.N. Doc. UNEP/CBD/COP/6/20 (May 27, 2002) [hereinafter Decision VI/26], available at <http://www.cbd.int/doc/meetings/cop/cop-06/official/cop-06-20-en.pdf> (“Parties commit

similar statement by the 2002 World Summit on Sustainable Development (“WSSD”).¹⁵ In an apparent contradiction of these expressions of global concern over biodiversity loss and the UNEP statements on weak implementation and compliance, the CBD stands out amongst other UNEP MEAs by its lack of a compliance mechanism.¹⁶ This leads to the wider research question: Why has the CBD—a multilateral agreement created precisely to address this problem—failed in arresting and reversing biodiversity loss? Is the problem, as held by UNEP, lack of implementation and compliance, or is there a deep-seated problem with the MEA system as a mechanism for arresting and reversing biodiversity loss?¹⁷ Assuming, as does the UNEP document, a causal relationship between compliance and effectiveness, non-compliance together with the absence of compliance mechanisms could be construed as a major obstacle in stopping biodiversity loss. However, this Article argues that in the context of the CBD, weak implementation and compliance is not a cause of ongoing biodiversity loss but rather an indicator of lack of global consensus on the critical necessity to protect biodiversity, resulting in an “un-implementable” and “non-compliable”

themselves to a more effective and coherent implementation of the three objectives of the Convention, to achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national level as a contribution to poverty alleviation and to the benefit of all life on earth.”).

15. WSSD, *supra* note 3, para. 44 (“Biodiversity, which plays a critical role in overall sustainable development and poverty eradication, is essential to our planet, human well-being and to the livelihood and cultural integrity of people. However, biodiversity is currently being lost at unprecedented rates due to human activities The Convention is the key instrument for the conservation and sustainable use of biological diversity and the fair and equitable sharing of benefits arising from use of genetic resources. A more efficient and coherent implementation of the three objectives of the Convention and *the achievement by 2010 of a significant reduction in the current rate of loss of biological diversity* will require the provision of new and additional financial and technical resources to developing countries.”).

16. *See infra* note 20.

17. *See* Nicholas Robinson, *Befogged Vision: International Environmental Governance after Rio*, 27 WM. & MARY ENVTL. L. & POL’Y REV 299, 318 (2002) (“Are the current systems for environmental governance adequate to implement the recommendations of Agenda 21? Surveying the institutional responsibilities as they exist after the WSSD raises some significant doubts.”). *See also* Kunich, *supra* note 13, at 112 (discussing the failure of international environmental law in reversing biodiversity loss and concluding, “the conventional international law approach has not worked and truly cannot work.”); Speth, *International Environmental Law: Can it Deal with the Big Issues?*, *supra* note 2, at 780 (“Those conventions have raised awareness, provided frameworks for action, and stimulated useful national planning exercises. But the bottom line is that these treaties do not drive the changes that are needed.”).

agreement that does not address the underlying drivers of biodiversity loss.¹⁸

The background against which this Article is written, and as exemplified by the UNEP document, is the growing emphasis on compliance with international environmental law, which has become a high priority on the international environmental agenda.¹⁹ The past two decades have seen a remarkable growth in the number of compliance mechanisms adopted by international environmental regimes.²⁰ Although various forms of compliance systems, such as self-reporting, have been part of the UNEP-administered MEAs for many years,²¹ the newcomers are formal procedures for verification of states' compliance with their commitments under these agreements. They are geared towards facilitating compliance and apparently are based on the belief that noncompliance is not intentional, but more a result of lack of "capability or clarity or priority."²² This "frenzy" of compliance mechanism-making²³ is arguably a reaction to criticism of MEAs for non-

18. Speth, *International Environmental Law: Can it Deal with the Big Issues?*, *supra* note 2, at 780 ("The issue with these treaties is not weak enforcement or non-compliance, it is weak treaties themselves.").

19. See Teall Crossen, *Multilateral Environmental Agreements and the Compliance Continuum*, 16 GEO. INT'L ENVTL. L. REV. 473, 475 (2004) ("This increased attention to compliance . . . is part of a recent development in the negotiation of MEAs to introduce treaty specific compliance regimes, which may incorporate enforcement mechanisms.").

20. See, e.g., CITES, *supra* note 13, art. VIII. See also Stockholm Convention on Persistent Organic Pollutants, May 23, 2001, art. 17 [hereinafter Stockholm Convention]; Cartagena Protocol on Biosafety, Jan. 29, 2000, 2226 U.N.T.S. 208, art. 34 [hereinafter the Cartagena Protocol]; The Aarhus Convention, June 25, 1998, 38 I.L.M. 517, art. 15; Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, September 10, 1998, 2244 U.N.T.S. 337, art. 17; Kyoto Protocol to the U.N. Framework Convention on Climate Change, Dec. 10, 1997, 37 I.L.M. 22, art. 18 [hereinafter the Kyoto Protocol]; Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean, June 10, 1995 (entered into force June 9, 2004) [hereinafter Barcelona Convention], *available at* http://www.unep.ch/regionalseas/regions/med/ t_barcel.htm; Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution on Further Reductions of Sulphur Emissions, June 14, 1994, 33 I.L.M. 1540, art. 7; Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, Mar. 22, 1989, 28 I.L.M. 657, art. 19 [hereinafter Basel Convention]; Montreal Protocol on Substances that Deplete the Ozone Layer, Sept. 16, 1987, 26 I.L.M. 1550, art. 8 [hereinafter Montreal Protocol]; ANALYZING INTERNATIONAL ENVIRONMENTAL REGIMES 83 (Helmut Breitmeier et al. eds., 2006).

21. See, e.g., Stockholm Convention, *supra* note 20, art. 15; Barcelona Convention, *supra* note 20, art. 26; Basel Convention, *supra* note 20, art. 13.3; Montreal Protocol, *supra* note 20, art. 7; CMS, *supra* note 13, art. VI.3; CITES, *supra* note 13, art. VIII.7.

22. ABRAM CHAYES & ANTONIA HANDLER CHAYES, *THE NEW SOVEREIGNTY* 22 (1998).

23. See, e.g., *supra* note 20 for examples of conventions and protocols that have

implementation and noncompliance, as illustrated by the recent adoption of a compliance mechanism in the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (“Barcelona Convention”).²⁴ The Barcelona Convention had been evaluated as a MEA of “low effectiveness.”²⁵ Stung by the criticism,²⁶ the creation of a compliance mechanism was perhaps the regime’s answer to the charges. Thus, a causal relationship between compliance and effectiveness has been posited²⁷ as seen in the UNEP document, and charges against MEAs for noncompliance are regarded in essence as challenges to the treaty’s legitimacy.²⁸

Critical to dealing with biodiversity loss is differentiating it from other major environmental issues, such as ozone depletion, global pollution by persistent organic pollutants, or depletion of fisheries. Its root causes are the proliferation of diverse activities that constitute modern daily living,²⁹ and reversing biodiversity loss will require significant behavioral changes. Things that until now have been assumed to be inalienable rights of citizens in democratic societies—where and how we live, our use of energy, the location, construction, components, and size of our homes, modes of transportation for ourselves and our goods, our consumer habits, the food we eat and the way it is grown, the

adopted compliance mechanisms.

24. The Barcelona Convention, *supra* note 20 (the Barcelona Convention was originally signed in 1976, but was revised and renamed in 1995).

25. See *infra* text accompanying note 185. See also Jon Skjaerseth, *The Effectiveness of the Mediterranean Action Plan*, in ENVIRONMENTAL REGIME EFFECTIVENESS 311, 311 (Edward L. Miles et al. eds., 2002).

26. Recounts the author’s experience as a member of the working group on establishing a compliance procedure for the Barcelona Convention. See *infra* notes 204–205 and accompanying text.

27. Victor et. al., *supra* note 2, at 7 (“Compliance is not an end in itself but rather a means to achieve effectiveness, which is in turn a means to manage environmental stresses.”). See also Oran R. Young & Marc Levy, *The Effectiveness of International Environmental Regimes*, in THE EFFECTIVENESS OF INTERNATIONAL ENVIRONMENTAL REGIMES 1, 1 (Oran R. Young ed., 1999) (“A regime that channels behavior in such as way as to eliminate or substantively ameliorate the problem that led to its creation is an effective regime. A regime that has little behavioral impact, by contrast, is an ineffective regime.”); Christopher Stone, *Is Environmentalism Dead?*, 38 ENVTL. L. 19, 39 (2008) (“Of course, the most important criteria of success is the bottom line . . . has the environment gotten better or worse?”).

28. Daniel Bodansky, *The Legitimacy of International Governance: A Coming Challenge for International Law?*, 93 AM. J. INT’L L. 596, 603 (1999) (“[L]egitimacy represents a potentially important basis of effectiveness, in addition to power and self-interest. [T]he more an institution is perceived as legitimate, the more stable and effective it is likely to be . . . [P]erceptions of legitimacy are an important basis of effectiveness . . .”). See also *infra* text accompanying notes 221–231.

29. See *id.*; RED SKY AT MORNING, *supra* note 2, at 88.

size of our families—all affect biodiversity. The enormity of these issues and the challenges in adapting our behavior to mitigate their effects on biodiversity, comprise what are perceived as insurmountable obstacles in achieving consensus on how to reverse biodiversity loss, and overcoming these obstacles means successfully addressing their underlying causes.³⁰

This Article proposes to explore the CBD from the perspective of its “non-compliance” to shed light on its apparent failure to protect biodiversity. Part II presents a thumbnail sketch of the present state of biodiversity, the factors behind its loss, and the consequences of its ongoing degradation. Part III addresses the CBD in the context of the UNEP document, viewing it through the lens of implementation and compliance. The decision to focus on the CBD was taken in light of its role as the primary global framework for biodiversity,³¹ its administration by UNEP, and its global membership of 191 parties.³² In a comparison with the CBD, Part IV reviews the Barcelona Convention’s structures for implementation and compliance to demonstrate how the factor of unilateral state action versus international collective action impacts MEA structure. Despite the differences between the two agreements, an obvious one being a global MEA versus a regional MEA, they are both framework conventions, under the aegis of UNEP, address biodiversity issues,³³ and most significantly, both are perceived as ineffective regimes.³⁴ Part V draws on the recent establishment of a compliance mechanism by the Barcelona Convention to explain the lack of a mechanism in the CBD. This Article proposes that the compliance mechanism signals legitimacy in answer to charges of ineffectiveness, hence the regime’s compelling need to justify its authority and prove its relevancy. In conclusion, Part VI summarizes the implications of the CBD as a legal tool for protecting biodiversity.

30. See Stone, *supra* note 27, at 45 (“Most people agree that we face serious environmental problems and know what they are. Getting people to change their behavior is more challenging. To change course we have to amend “lifestyle,” a formidable obstacle There have to be changes in “values”—in how we assess impact . . . on the other living things with which we share the planet.”). See also Decision VI/26, *supra* note 14, paras. 1(a), 7(a) (noting obstacles to the implementation of the CBD include the “lack of political will and support to implement the Convention” and “poverty, population, and unsustainable consumption and production patterns.”).

31. MANUAL, *supra* note 1, at 746 (defining “Framework Agreement” as a “convention that provides a decision-making and organizational framework for the adoption of subsequent complementary agreements (*e.g.*, Protocol). Usually contains substantial provisions of a general nature, the details of which can be provided in the subsequent agreements.”).

32. Convention on Biological Diversity, List of Parties, <http://www.cbd.int/convention/parties/list.shtml> (last visited Sept. 27, 2009).

33. See Barcelona Convention, *supra* note 20, art. 10.

34. See *infra* text accompanying notes 141–145, 181.

II. THE MEANING AND SIGNIFICANCE OF BIODIVERSITY LOSS

The CBD defines “biodiversity loss” as “the long-term or permanent qualitative or quantitative reduction in components of biodiversity and their potential to provide goods and services, to be measured at global, regional and national levels.”³⁵ This definition has been further explained by the Millennium Ecosystem Assessment, the global report on “Ecosystems and Human Well-Being, Biodiversity Synthesis”:

[B]iodiversity can be lost either if the diversity per se is reduced (such as through the extinction of some species) or if the potential of the components of diversity to provide a particular service is diminished (such as through unsustainable harvest). The homogenization of biodiversity—that is, the spread of invasive species around the world—thus also represents a loss of biodiversity at a global scale³⁶

Why should any of this matter? Because we are in the midst of a sixth wave of extinction of which we—by destroying biodiversity—are the cause.³⁷ The previous wave of extinction occurred sixty-five million years ago. Its most poignant victims as captured in the public imagination were the dinosaurs, whose end was our beginning, the age of the mammals.³⁸ The significance of this current massive wave of extinction for us and the rest of life is that Earth is losing its biological diversity, the foundation for its ecological systems which is the sine qua

35. Conference of the Parties to the Convention on Biological Diversity, Seventh Meeting, Kuala Lumpur, Feb. 9–20, 27, 2004, *Report of the Seventh Meeting of the Conference of the Parties to the Convention on Biological Diversity*, Decision VII/30, para. 2, U.N. Doc. UNEP/CBD/COP/7/21 (Apr. 13, 2004) [hereinafter Decision VII/30], available at <http://www.cbd.int/doc/decisions/COP-07-dec-en.pdf>.

36. MILLENNIUM ECOSYSTEM ASSESSMENT, ECOSYSTEMS AND HUMAN WELL-BEING, BIODIVERSITY SYNTHESIS 2 (World Resources Institute 2005), [hereinafter MILLENNIUM ECOSYSTEM ASSESSMENT], available at <http://www.millenniumassessment.org/documents/document.354.aspx.pdf>.

37. See, e.g., EDWARD O. WILSON, DIVERSITY OF LIFE 30-2 (Penguin Books 2001) (“[H]umanity has initiated the sixth great extinction spasm, rushing to eternity a large fraction of our fellow species in a single generation I will argue that every scrap of biological diversity is priceless, to be learned and cherished, and never to be surrendered without a struggle.”).

38. *Id.* at 23. See EDWARD O. WILSON, CONSILIENCE: THE UNITY OF KNOWLEDGE 294 (Alfred Knopf, New York, 1998); Jim Chen, *Legal Mythmaking in a Time of Mass Extinctions: Reconciling Stories of Origins with Human Destiny*, 29 HARV ENVTL. L. REV. 279, 284 (2005).

non for the existence of life on the planet.³⁹ According to the most recent reports, the ongoing phenomenon is worsening, exemplified by increases in species loss.⁴⁰ Based solely on data from loss of biodiversity in Amazonian tropical forests, we are losing on average seventy-four species per day, three species per hour.⁴¹ By failing to change human behavior, the cause of this huge loss of biodiversity, international environmental law has failed to protect biodiversity.⁴²

39. See generally WORLD WILDLIFE FUND, LIVING PLANET REPORT 2008, at 12 (Chris Hails ed., 2008) [hereinafter Living Planet Report], available at http://assets.panda.org/downloads/living_planet_report.pdf (discussing species loss and population decline resulting from human activity: "[w]hile populations of species are increasing and decreasing in different areas of the globe . . . the overwhelming picture that is seen from averaging these trends is one of global decline in species abundance. Apart from representing a regrettable loss in terms of global biodiversity, this trend has implications for human well-being. Humans depend on healthy ecosystems and thriving species populations to ensure the continued provision of ecological services."). See also PAUL M. WOOD, BIODIVERSITY AND DEMOCRACY xv (2000) (explaining that "[b]iodiversity . . . is a necessary precondition for the maintenance of the biological resources on which humans depend."); see *infra* text accompanying notes 43-46.

40. See LIVING PLANET REPORT, *supra* note 39, at 12 (stating the Living Planet Index of global biodiversity, as measured by populations of 1,686 vertebrate species across all regions of the world, has declined by nearly 30 percent over the past 35 years (Figure 1)). See also The Secretariat of the Convention on Biological Diversity, Global Biodiversity Outlook 2, 25-26 (2006), available at <http://www.cbd.int/doc/gbo/gbo2/cbd-gbo2-en.pdf>; MILLENNIUM ECOSYSTEM ASSESSMENT, *supra* note 36, at 3-4 ("Across a range of taxonomic groups, the population size or range (or both) of the majority of species is declining. Studies . . . show declines in populations of the majority of species Over the past few hundred years, humans have increased the species extinction rate by as much as 1,000 times the background rates that were typical over the planet's history"); EDWARD O. WILSON, BIOLOGICAL DIVERSITY: THE OLDEST HUMAN HERITAGE 23-24 (1999) ("A common estimate among biodiversity specialists . . . is that *one-fourth of the species of organisms on earth are likely to be eliminated outright or doomed to early extinction within the next 30 years if current rates of habitat destruction continue unabated.*").

41. WILSON, DIVERSITY OF LIFE, *supra* note 37, at 268; Chen, *supra* note 38, at 282 ("Sources predict anywhere between 0.6% and 30% of biodiversity loss per decade, with most estimates falling between 1% and 10%. Under even a 'conservative estimate' that attributes extinction solely to rainforest destruction, 27,000 species are lost every year"). See also Lakshman D. Guruswamy & Jeffrey A. McNeely, *Conclusion: How to Save the Biodiversity of Planet Earth*, in PROTECTION OF GLOBAL BIODIVERSITY, *supra* note 13, at 381 ("[W]hile rates of extinction may be useful in drawing public attention to the problems of biodiversity, these rates should not be driving public policy . . . policy should be driven by the need to conserve all biodiversity, from genes to life zones . . .").

42. Kunich, *supra* note 13, at 1-2 ("We are currently in the midst of at least the sixth mass extinction in this planet's history - catastrophic death spasms in which vast numbers of species and higher taxa disappear. . . . I will demonstrate that stacks of international . . . laws have done nothing more to prevent this devastation than to act as a dangerous placebo.").

The Millennium Ecosystem Assessment has determined, “*with high certainty*, that biodiversity loss and deteriorating ecosystem services contribute . . . to worsening health, higher food insecurity, increasing vulnerability [to natural hazards such as flooding], lower material wealth, worsening social relations, and less freedom for choice and action.”⁴³ Biodiversity loss affects quantities and quality of water needed for domestic and agricultural use,⁴⁴ means and sources of sustenance and livelihoods,⁴⁵ and generally is responsible for the worsening state of ecosystem services such as “capture fisheries, timber production, water supply, waste treatment and detoxification, water purification, natural hazard protection, regulation of air quality, . . . [and] regulation of erosion”⁴⁶

In analyzing the root causes for biodiversity loss, the Millennium Ecosystem Assessment differentiates between direct and indirect drivers of change in biodiversity and ecosystem services. The report has assessed certain indirect drivers—cultural and religious, demographic, economic, scientific, socio-political, and technological—and notes in particular that the “growing consumption of ecosystem services (as well as the growing use of fossil fuels), which results from growing populations and growing per capita consumption, leads to increased pressure on ecosystems and biodiversity.”⁴⁷ The dominant direct drivers of loss of biodiversity and ecosystem services are anthropogenic climate change, habitat change, invasive species, nutrient loading (anthropogenic increases in nitrogen, phosphorus, sulphur, and other nutrient associated pollutants), and overexploitation of species.⁴⁸

Undeniably, contending with the above appears an insurmountable task, and requires shaking up a familiar and entrenched way of life for those of us lucky enough to enjoy it. The advantages, including the high standards of living gained by some groups and societies as well as individuals, from the use of biodiversity and its loss have been the source of impoverishment and other hardships to those “with low resilience to ecosystem changes.”⁴⁹ Government awards of ecosystem services—such as timber, fishing, mining,⁵⁰ and farming rights or subsidies— to special

43. MILLENNIUM ECOSYSTEM ASSESSMENT, *supra* note 36, at 30.

44. *Id.* at 31.

45. *Id.* at 32.

46. *Id.* at 32, 37.

47. *Id.* at 8.

48. *Id.*

49. *Id.* at 40.

50. *Id.* See also Environmental Working Group, *Mining Law Threatens Grand Canyon, other Natural Treasures*, Executive Summary, http://www.ewg.org/sites/mining_google/US/analysis.php (last visited Oct. 19, 2009).

interest groups deprives those other groups that have depended on these services for their sustenance and livelihoods.⁵¹ Thus, as the demand for ecosystem functions grows, the disadvantaged usually lose to stronger, more privileged groups in societies.⁵² It is understandable that governments do not want to contend with root causes of biodiversity loss, as it entails changing the status quo for “special interest” groups, a politically dangerous step. Thus, instead of undertaking critically necessary measures to contend with these underlying factors, governments have preferred to create a “myth” of action to address biodiversity loss by adopting weak agreements of dubious effectiveness.⁵³

The CBD is an example of this myth of action. It addresses the symptoms, or indicators, of biodiversity loss, such as ecosystem degradation and species extinction,⁵⁴ but not the underlying drivers, such as high population growth, even greater economic growth together with the misuse of fossil fuels as a primary energy source, over-consumption, growing food demand, and overwhelming poverty.⁵⁵ Beyond these

51. MILLENNIUM ECOSYSTEM ASSESSMENT, *supra* note 36, at 40. *See generally* NORMAN MYERS & JENNIFER KENT, *PERVERSE SUBSIDIES, HOW TAX DOLLARS CAN UNDERCUT THE ENVIRONMENT AND THE ECONOMY* (2001) (on the role of subsidies in biodiversity loss); Int'l Union for Conservation of Nature, *Put Nature at Centre of Food Crisis Debate*, *Says IUCN*, June 6, 2008, <http://cms.iucn.org/index.cfm?uNewsID=1082> (“The Declaration on World Food Security, adopted in Rome on June 5, fell short of showing the political will needed to address the underlying causes of the food crisis, according to IUCN.”).

52. MILLENNIUM ENVIRONMENTAL ASSESSMENT, *supra* note 36, at 40. *See also* Int'l Union, *supra* note 51, at 40 (“The impacts of climate change are expected to hit hardest some of the most vulnerable and food insecure parts of the globe Some of the expected impacts are changes in agricultural productivity and shifts in growing seasons, increased floods and droughts, decreased water quality and availability, and the propagation of crop and animal pests and diseases. Many of these impacts are already being felt.”).

53. Speth, *International Environmental Law: Can it Deal with the Big Issues?*, *supra* note 2, at 786 (A “significant feature of the history of international response to the global change agenda is that the responses have followed closely what we can call the ‘problem-defined approach.’ A biodiversity problem leads to a biodiversity convention The real problem might be something more basic like poverty . . . but the conventions were framed to address the surface worry rather than the deeper problems. They did not go after underlying causes or drivers of deterioration.”).

54. *See infra* text accompanying note 75.

55. Speth, *International Environmental Law: Can it Deal with the Big Issues?*, *supra* note 2, at 781–82 (“[G]lobal-scale environmental deterioration is driven by very powerful forces [P]opulation may have increased four-fold in the past century, but world economic output increased twenty-fold Energy use moved in close step with economic expansion, rising at least eighteen-fold in the twentieth century [G]lobal emissions of carbon dioxide . . . will increase by sixty percent between 2001 and 2025. Growing food demand is projected to increase the area under cultivation by twenty-five

causes of biodiversity loss lie deeper factors, such as the failure of market prices to reflect full environmental costs, the concept that growth is always good and must be pursued at any cost,⁵⁶ and the still-prevailing dominant ethic that human beings are the masters of all other species, to be done with as we desire.⁵⁷

As eyewitnesses to, and the cause of, the greatest wave of extinction in sixty-five million years, we should be deeply disturbed and frustrated by the realization that the major weapon that the global community has devised to fight this massive destruction—international agreements—has failed its mission.⁵⁸ The following will explore the factors behind the failure of the principal biodiversity agreement, the CBD, in reversing biodiversity loss.

III. THE CONVENTION ON BIOLOGICAL DIVERSITY

A. Introduction

The CBD was adopted at the United Nations Conference on Environment and Development (“UNCED”) in 1992, together with the United Nations Framework Convention on Climate Change (“UNFCCC”).⁵⁹ Along with the United Nations Convention to Combat Desertification (“UNCCD”),⁶⁰ these agreements are known as the three “Rio Agreements.” The conservation of biological diversity is one of the CBD’s three objectives; the other objectives are the sustainable use of biological diversity’s components and the “fair and equitable sharing of

percent in Africa and twenty percent in Latin America by 2030, extending agriculture further into once-forested areas and onto fragile lands in semi-arid zones.”).

56. MILLENNIUM ECOSYSTEM ASSESSMENT, *supra* note 36, at 13 (“[T]he basic challenge remains that the current economic system relies fundamentally on economic growth that disregards its impact on natural resources.”).

57. RED SKY AT MORNING, *supra* note 2, at 24.

58. Kunich, *supra* note 13, at 126 (discussing the need to “break out of the international law paradigm and try a completely new approach”). *See also* RED SKY AT MORNING, *supra* note 2, at 97 (“[I]t is a frightening thought to conclude that either way we have wasted much time of the twenty years we could have spent preparing for action Global environmental problems have gone from bad to worse, governments are not yet prepared to deal with them, and at present, many governments, including some of the most important, lack the leadership to get prepared.”).

59. U.N. Framework Convention on Climate Change, May 9, 1992, 31 I.L.M. 849 [hereinafter UNFCCC].

60. U.N. Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, June 17, 1994, 33 I.L.M. 1328 [hereinafter UNCCD].

the benefits arising out of the utilization of genetic resources.”⁶¹ Keeping in mind the UNEP document’s assertion that environmental degradation is a result of non-implementation of and noncompliance with MEAs, the following review of the CBD will focus on the agreement’s objective of biodiversity conservation and review its provisions and obligations for reducing biodiversity loss from the perspective of implementation and compliance.

B. Protecting and Conserving Biodiversity Under the CBD

Reviewing the CBD’s obligations on biodiversity protection and conservation draws forth the realization that the agreement text does not refer to the causes of biodiversity loss, but simply states in the preamble, tongue in cheek, that the Contracting Parties are “[c]oncerned that biological diversity is being significantly reduced by certain human activities.”⁶² The preamble does, however, testify as to the awareness of its negotiators to “the importance of biological diversity for evolution and for maintaining life sustaining systems of the biosphere,”⁶³ to the need “to anticipate, prevent and attack the causes of significant reduction or loss of biological diversity at source,”⁶⁴ and that “where there is a threat of significant reduction or loss of biological diversity, lack of scientific uncertainty should not be used as a reason for postponing measures to avoid or minimize such a threat.”⁶⁵

Notwithstanding the importance that the preamble attaches to the protection and conservation of biodiversity, the agreement makes clear that committing developing states to addressing biodiversity loss has its price: increased financial and technological assistance from developed states. Thus, the CBD emphasizes not only ending biodiversity loss, but also recognizes “that economic and social development and poverty eradication are the first and overriding priorities of developing countries.”⁶⁶ The significance of the preamble’s declarations for protecting biodiversity is further weakened by the insistence of

61. CBD, *supra* note 11, art. 1.

62. CBD, *supra* note 11, pmb.

63. *Id.*

64. *Id.*

65. *Id.*

66. CBD, *supra* note 11, pmb. *But see* Guruswamy, *supra* note 13, at 353 (“By any analysis, the elevation of development and the diminishment of biodiversity is clear In the absence of an explicit commitment to protect biodiversity, any resources transferred under the CBD could be used by a small minority of zealous developing countries to advance their own concept of economic and social development [E]ven the cutting down of tropical forests is necessary for economic and social development, and [thus] they would be acting within the powers and privileges granted to them.”)

governments on entrenching recognition of their sovereignty over biodiversity by “Reaffirming that States have sovereign rights over their own biological resources,”⁶⁷ thus contradicting the conceptualization of biodiversity as a global common resource.⁶⁸ The above declaration has been qualified to a certain extent by Article 3, which, after confirming the principle of state sovereignty, attaches the no-harm principle that charges states “to ensure that activities within their jurisdiction of control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.”⁶⁹ However, the bottom line remains that states are entitled to exploit—or protect—biodiversity found within their territorial borders as they see fit, and the agreement imposes no effective safeguards to prevent its degradation.⁷⁰

The CBD does little to turn its preamble’s declarations on the importance of biodiversity into operative provisions. Attempts to impose binding substantive obligations to reduce biodiversity loss on the Contracting Parties culminated in ambiguous, weak, and qualified commitments. For example, Article 5, entitled “Cooperation,” obligates each Contracting Party to cooperate with others “for the conservation and sustainable use of biological diversity,” but only in “areas *beyond* national jurisdiction” (emphasis added) and “as far as possible and as appropriate.”⁷¹ This qualifying phrase weaves throughout the convention text like a red skein, leaving enfeebled commitments in its wake. It has transformed both Article 6(b), which obligates parties to integrate the conservation and sustainable use of biodiversity into national plans and policies,⁷² and Article 7, which obligates parties to

67. CBD, *supra* note 11, pmb1.

68. See Guruswamy, *supra* note 13, at 354. (“Although the collective obligation to protect biodiversity was seen . . . constituting the foundations of the new treaty, the CBD rejects such an obligation, instead proclaiming that states have the ‘sovereign right to exploit their own resources pursuant to their own environmental policies.’ ”); Timothy Swanson, *The International Regulation of Biodiversity Decline: Optimal Policy and Evolutionary Product*, in BIODIVERSITY LOSS, ECONOMIC AND ECOLOGICAL ISSUES 225, 228 (Charles Perrings et al. eds., 1995) (framing “the nature of the problem of global biodiversity losses . . . resulting from the decentralised regulation of a process with clear global implications . . . deriv[ing] from the fact that the impacts of national resource exploitation on global stocks are not considered by individual regulator states.”).

69. CBD, *supra* note 11, art. 3 (embodying Principle 21 to the Stockholm Declaration and Principle 2 to the Rio Declaration that states have a sovereign right to their own resources and a duty to prevent their resource exploitation from affecting other states).

70. See Kunich, *supra* note 13, at 28–29.

71. CBD, *supra* note 11, art. 5. See also Guruswamy, *supra* note 13, at 354; John Kunich, *Fiddling Around While the Hotspots Burn Out*, 14 GEO. INT’L ENVTL. L. REV. 179, 188 (2001).

72. CBD, *supra* note 11, art. 6.

identify and monitor both components of biodiversity and activities which impact it, into non-compliable obligations since verification of compliance with them is virtually impossible.⁷³ Moreover, the phrase “in accordance with its particular conditions and capabilities” further qualifies the responsibility of “each Contracting Party” in performing its obligations.⁷⁴

Article 8 could have constituted the core of a binding biodiversity conservation strategy. It obligates parties to undertake specific measures to protect biodiversity *in situ*,⁷⁵ including the establishment of protected areas,⁷⁶ the sustainable management of biological resources,⁷⁷ the protection of ecosystems and natural habitats, the “maintenance of viable populations of species,”⁷⁸ the rehabilitation and restoration of degraded ecosystems and threatened species,⁷⁹ the control and eradication of alien species,⁸⁰ the implementation of legislation for the protection of species,⁸¹ the regulation or management of activities that have adverse effects on biodiversity⁸² and cooperation in providing financial aid to support *in situ* conservation in developing countries.⁸³ However, the same escape clause text “as far as possible and as appropriate” was added to its chapeau. Thus Article 8, instead of being the nucleus of the agreement to protect, manage, and restore biodiversity, has been rendered amorphous by these words.”⁸⁴

Article 9 deals with *ex situ* conservation. Again, the obligations that it imposes on the parties for achieving this objective, including “measures for the recovery and rehabilitation of threatened species and for their reintroduction into their natural habitats,” are qualified by the words “as far as possible and as appropriate.”⁸⁵ The obligation to promote sustainable use of biodiversity imposed by the CBD on parties in Article 10,⁸⁶ as well as the obligation to adopt economic incentives to promote the agreement’s objectives of conservation and sustainable use

73. *Id.* art. 7.

74. *Id.* art. 6.

75. *Id.* art. 8.

76. *Id.* art. 8(a).

77. *Id.* art. 8(c).

78. *Id.* art. 8(d).

79. *Id.* art. 8(f).

80. *Id.* art. 8(h).

81. *Id.* art. 8(k).

82. *Id.* art. 8(l).

83. *Id.* art. 8(m).

84. *Id.* art. 8. *See also* Guruswamy, *supra* note 13, at 354.

85. CBD, *supra* note 11, art. 9.

86. *Id.* art. 10.

of biodiversity imposed in Article 11,⁸⁷ contain the same qualifying phrase, as does Article 14, which attempts to obligate parties to undertake procedures for environmental impact assessment.⁸⁸ Even in cases of “imminent or grave danger or damage” to biodiversity of other states,⁸⁹ the obligation of the responsible state to notify others as well as to act to prevent or minimize the danger, is only binding “as far as possible and as appropriate,” as is the obligation to “promote national arrangements for emergency responses” to situations that endanger biodiversity.⁹⁰

Arguably, this qualifying phrase expresses the negotiating parties’ lack of will to adopt a meaningful agreement, emanating from political considerations based on north/south tensions that eclipsed the need for a strong, binding agreement that would commit governments to action.⁹¹ But these political considerations come with the cost of the loss of legitimacy for the CBD.⁹² Drawing on both Abram and Antonia Chayes and Thomas Franck’s work discussing legitimacy as a factor in compliance with international law (and as discussed in Part IV),⁹³ this Article concludes that the ambiguity of the CBD’s provisions signify a lack of “determinacy” which, according to Franck, is a factor in determining the degree of legitimacy of the international regime.⁹⁴ The Chayes also attribute perceived noncompliance to “ambiguity and indeterminacy of treaty language,”⁹⁵ and identify ambiguity as one of three underlying causes for violations of international agreements, the others being lack of capacity for implementation and change of circumstances in the social, economic, or political areas.⁹⁶ In discussing

87. *Id.* art. 11.

88. *Id.* art. 14.

89. *Id.* art. 14(d).

90. *Id.* art. 14(e).

91. Speth, *International Environmental Law: Can it Deal with the Big Issues?*, *supra* note 2. See also Kunich, *supra* note 13, at 58–66 (discussing the shortcomings of the CBD as an international legal tool for reversing biodiversity loss).

92. See Philippe Le Prestre, *The Convention on Biological Diversity: Negotiating the Turn to Effective Implementation*, 3 ISUMA: CAN. J. OF POL’Y RES. 92, 97 (2002) (“Strengthening the legitimacy of the CBD is . . . a great[er] challenge . . . industrialized countries were able to focus the regime on conservation and access to genetic resources, while developing countries secured sovereignty over natural resources, differentiated responsibilities, benefit-sharing and sustainable use. But this compromise is also paradoxically the source of some illegitimacy as various constituencies question purposes they deem peripheral to their concerns and denounce the ‘lack of results’ of the convention . . .”).

93. See *infra* text accompanying notes 226-31.

94. THOMAS M. FRANCK, *THE POWER OF LEGITIMACY AMONG NATIONS* 52 (1990).

95. CHAYES, *supra* note 22, at 10.

96. *Id.* at 10, 15.

“a zone of ambiguity” the Chayes point out that ambiguous language allow states a wide range of interpretation concerning compliance with the agreement.⁹⁷

In contrast to the qualified and conditional nature of the CBD's substantive provisions for protecting biodiversity, provisions of a technical or financial nature are more focused and specific. The Contracting Parties have an unqualified obligation to establish educational programs for biodiversity education,⁹⁸ promote research in the conservation and sustainable use of biological diversity,⁹⁹ promote public education and awareness of biodiversity issues,¹⁰⁰ exchange information,¹⁰¹ engage in technical and scientific cooperation to strengthen national capabilities,¹⁰² train personnel, and exchange experts.¹⁰³ Article 20, “Financial Resources,” obligates developed country Parties to “provide new and additional financial resources to enable developing country Parties to meet the agreed full incremental costs to them of implementing measures which fulfil the obligations of this Convention.”¹⁰⁴ Significantly, the CBD notes that:

The extent to which developing country Parties will *effectively implement* their commitments under this Convention will depend on the effective implementation by developed country Parties of their commitments under this Convention related to financial resources and transfer of technology and will take fully into account the fact that economic and social development and eradication of poverty are the first and overriding priorities of the developing country Parties.
105

97. *Id.* at 10 (“Treaties . . . frequently do not provide determinate answers to specific disputed questions . . . the effort to formulate rules to govern future conduct can produce a zone of ambiguity within which it is difficult to say with precision what is permitted and what is forbidden.”).

98. CBD, *supra* note 11, art. 12(a).

99. *Id.* art. 12(b).

100. *Id.* art. 13(a).

101. *Id.* art. 17(1).

102. *Id.* art. 18(2).

103. *Id.* art. 18(4).

104. *Id.* art. 20(2). *See also* Guruswamy, *supra* note 13, at 353 (critiquing art. 20(2) and noting that in exchange for financial assistance and technology, the developing countries have no obligation to conserve biodiversity, but rather their first priority is development).

105. CBD, *supra* note 11, art. 20(4) (emphasis added) (“The present arrangements deny the legal responsibility of the community of nations to protect . . . biodiversity . . . depend[ing] on the extent to which they are bankrolled by developed countries.”). Guruswamy, *supra* note 13, at 355.

Thus, implementation by developing countries is conditional to implementation by developed countries of their commitments for increased financial resources and technology transfer. Moreover, the recognition granted in the preamble that “economic and social development and poverty eradication are the first and overriding priorities of developing countries” removes any doubt as to their intentions in negotiating the agreement.¹⁰⁶ And even assuming that the developing countries implement their commitments, in light of the ambiguous nature of the CBD’s substantive provisions dealing with biodiversity protection, defining their effective implementation would be an elusive task.¹⁰⁷

C. Implementation of the CBD

Generally speaking, the agreement’s implementation is challenging simply because of its comprehensiveness, as reflected in its three objectives,¹⁰⁸ and the resultant heavy workload. Since the year 2000, the CBD’s Conference of the Parties (“COP”) has adopted 131 decisions that impose 413 tasks on the Secretariat.¹⁰⁹ The ninth COP meeting, which took place in May 2008, adopted an additional thirty-seven decisions on topics ranging from forest biodiversity and agricultural biodiversity to technical issues on the convention’s operations.¹¹⁰ Despite the vast number of issues and areas that its parties are expected to address, the agreement suffers from a weakly structured implementation system.

106. Guruswamy, *supra* note 13, at 353.

107. *But see* CBD, *supra* note 11, art. 26 (imposing an unqualified obligation on each contracting party to report “[o]n measures which it has taken for the implementation of the provisions of this Convention and their effectiveness in meeting the objectives of this Convention.”).

108. Decision VI/26, *supra* note 14, para. 8 (“The implementation of the Convention on Biological Diversity has been impeded by many obstacles as outlined in the appendix hereto. A fundamental challenge for the Convention lies in the broad scope of its three objectives.”). *See also infra* note 130; Wold, *supra* note 13 at 10–14.

109. Conference of the Parties to the Convention on Biological Diversity, Bonn, Ger., May 19–30, *Proposed Budget for the Programme of Work of the Convention on Biological Diversity for the Biennium 2009–2010*, para. 5, U.N. Doc. UNEP/CBD/COP/9/27 (2008), available at <http://www.cbd.int/doc/meetings/cop/cop-09/official/cop-09-27-en.pdf>.

110. *Summary of the Ninth Conference of the Parties to the Convention on Biological Diversity*, 9 EARTH NEGOTIATIONS BULLETIN, No. 452, 1, June 2, 2008, available at <http://www.iisd.ca/download/pdf/enb09452e.pdf>, 1 (“COP 9 has shown, much more than any previous COP, that the CBD encompasses a plethora of sub-processes, many of which are running on their own schedule. The CBD’s main challenge on the way to and past 2010 will be to bring all these sub-processes together and draw a coherent picture of the state of implementation, on the basis of eventually identified priorities and needs in the field.”).

Unlike the other two Rio agreements, the UNFCCC¹¹¹ and the UNCCD,¹¹² the CBD contains no article that deals specifically with implementation. Instead, Article 23, entitled “Conference of the Parties,” generally mandates the COP to “keep under review the implementation of the present convention”¹¹³ and authorizes it “to establish such subsidiary bodies . . . as are deemed necessary for the implementation of this Convention.”¹¹⁴ The lack of a specific structure for implementation contrasts with the more detailed implementation systems of the other Rio agreements.¹¹⁵ Article 10 of the UNFCCC, entitled “Subsidiary Body for Implementation,” establishes a specific body for implementation¹¹⁶ rather than leaving the matter to the discretion of its COP, as does the CBD. Article 13 of the UNFCCC, entitled “Resolution of Questions Regarding Implementation,” mandates “the establishment of a multilateral consultative process . . . for . . . the implementation of the Convention.”¹¹⁷ The UNCCD, in addition to its more standard implementation authorities for its COP under Article 22,¹¹⁸ charges its COP in Article 27 to “consider and adopt procedures and institutional mechanisms for the resolution of questions that may arise with regard to the implementation of the Convention.”¹¹⁹ Thus, in comparison to the other two agreements, implementation was apparently an issue of lesser concern to the CBD negotiators.

The CBD does however contain additional provisions that provide the legal framework for strengthening the agreement’s implementation. The COP can “[c]onsider and adopt, as required, protocols in accordance with Article 28,”¹²⁰ and may “[c]onsider and adopt, as required, in accordance with Article 30, additional annexes to this Convention.”¹²¹ Despite these provisions, which presumably express the intent of the

111. UNFCCC, *supra* note 59.

112. UNCCD, *supra* note 60.

113. CBD, *supra* note 11, art. 23.4.

114. *Id.* art. 23.4(g).

115. See Le Prestre, *supra* note 92, at 93 (“[U]nlike the UNFCC and the United Nations Convention to Combat Desertification (UNCDD), no new subsidiary body for implementation has been created.”)

116. The UNFCCC, *supra* note 59, art 10.

117. *Id.* art. 13. Compare Xueman Wang & Glenn Wisner, *The Implementation and Compliance Regimes under the Climate Change Convention and its Kyoto Protocol*, 11 REV. EUR. COMMUNITY & INT’L ENVT’L L. 180, 186 (2002) (“Unfortunately, the COP never finalized the multilateral consultative procedure because it was unable to agree upon the MCC’s [multilateral consultative committee] composition and size.”).

118. The UNCCD, *supra* note 60, art. 22.

119. *Id.* art. 27.

120. CBD, *supra* note 11, art. 23.4(c).

121. *Id.* art. 23.4(f).

negotiators to create protocols and annexes as mechanisms for implementing the CBD, only one protocol has been adopted so far,¹²² while the existing annexes were adopted together with the agreement itself.¹²³

Under heavy criticism for what is perceived as lack of implementation,¹²⁴ the CBD's COP adopted a "strategic plan" consisting of numerous goals and objectives.¹²⁵ The strategic plan plainly states, "the rate of biodiversity loss is increasing at an unprecedented rate, threatening the very existence of life as it is currently understood."¹²⁶ The strategic plan was in turn followed by "a framework to enhance the evaluation of achievements and progress in the implementation of the Strategic Plan,"¹²⁷ including seven focal areas as well as goals and targets for each one.¹²⁸ The complexity of the strategic plan, designed to be implemented by national action plans and strategies,¹²⁹ has become an obstacle to the CBD's implementation.¹³⁰ Aware of this situation and "recognizing . . . the need for a mechanism to review implementation of the Convention,"¹³¹ an "Ad Hoc Open Ended Working Group on Review of Implementation of the Convention" has been established as part of the above framework.¹³² Thus a convoluted implementation system has evolved, in which each stage was developed to strengthen implementation while the consecutive stage was devised to verify the previous one.

D. Compliance with the CBD

The above review of the CBD suggests that despite UNEP's position on strengthening compliance, its obligations were intentionally drafted as qualified and ambiguous commitments to ensure murky and

122. *See infra* text accompanying note 158.

123. CBD, *supra* note 11, Annexes I–II.

124. *See, e.g.*, Guruswamy, *supra* note 13.

125. Decision VI/26, *supra* note 14, para. 2. (noting that the purpose of the Strategic Plan "is to effectively halt the loss of biodiversity.").

126. *Id.* para. 4.

127. *See* Decision VII/30, *supra* note 35, para. 1.

128. *Id.* para. 11.

129. Decision VI/26, *supra* note 14, para. 12.

130. *See e.g.*, McGraw, *supra* note 13, at 24 ("COP's overcrowded agenda . . . and the proliferation of subsidiary bodies and processes have resulted in a diffusion of limited energy, attention, and resources among state and non-state actors alike.").

131. Decision VII/30, *supra* note 35, pmb1.

132. *Id.* para. 23 ("Recognizing the need to establish a process, for evaluating, reporting and reviewing the Strategic Plan . . .").

elusive compliance.¹³³ For example, it is difficult for a party to know whether actions “to rehabilitate and restore degraded ecosystems”¹³⁴ meet the standard of “as far as possible and as appropriate.” Compliance with ambiguous commitments is only part of the problem; the other is verification of compliance. There is no objective mechanism, for example, to verify a party’s compliance with the above obligation. A party could justifiably argue that the measures it undertakes meet the condition “as far as possible and as appropriate,” denying any objective standard of measurement. The agreement text does not allude to “compliance.” This is arguably because the CBD was meant to be implemented at a national level, and therefore compliance would have been deemed irrelevant on an international level.

The CBD contrasts with MEAs that are based on international regulatory structures containing compliance procedures such as CITES,¹³⁵ the Montreal Protocol,¹³⁶ or the Stockholm Convention.¹³⁷ Conversely, the Barcelona Convention, which is meant to be implemented at a national level, *does* contain an explicit article authorizing the establishment of compliance procedures.¹³⁸ Thus, the absence of a similar authorization in the CBD strengthens the argument that the CBD negotiators intentionally left compliance issues vague. As discussed below,¹³⁹ if stemming biodiversity loss is dependent on unilateral state action—in contrast to collective global action—states have little incentive to lay an effective international law basis for their own compliance. And if compliance is of concern to the individual state only at the national level because of domestic public pressure, then states will ensure that the obligations to which they agree are sufficiently feeble to ensure easy compliance.¹⁴⁰

133. *Supra* text accompanying notes 71–90. J. See also Joseph F.C. DiMento, *Process, Norms, Compliance, and International Environmental Law*, 18 J. ENVTL. L. & LITIG. 251, 268 (2003) (“To the degree that norms are ambiguous, they are unable to regulate behavior.”) (quoting Michael Hechter and Karl-Dieter Opp, *What Have We Learned About the Emergence of Social Norms? in* SOCIAL NORMS 399, 411 (Michael Hechter & Karl-Dieter Opp eds., 2001)).

134. CBD, *supra* note 11, art. 8(f).

135. CITES, *supra* note 13.

136. The Montreal Protocol, *supra* note 20.

137. The Stockholm Convention, *supra* note 20.

138. See *infra* text accompanying note 203; the Barcelona Convention, *supra* note 20, art. 21.

139. See *infra* pts. III(E)(2), V.

140. See RED SKY AT MORNING, *supra* note 2, at 97 (“These agreements are easy for governments to slight because their impressive goals are not followed by clear requirements, targets, and timetables. Underlying these shortcomings are debilitating procedures and an unwillingness to commit financial resources needed for real incentives. We still have a long, long way to go to make our major environmental treaties

E. The failure of the CBD to stop biodiversity loss

Lakshman Guruswamy critiques the CBD: “[t]he Convention on Biological Diversity fails to address the problems it was meant to remedy. It declined to institutionalize the common responsibility of humanity to protect biodiversity, rejected the extension of state responsibility for damage to the global commons, and effectively spurned the concept of sustainable development.”¹⁴¹ Guruswamy enumerates three points to support his argument that the CBD cannot reverse biodiversity loss: 1) it contradicts the principle of sustainable development by prioritizing the economic development of developing countries;¹⁴² 2) it does not impose binding “substantive protection obligation[s]” on its state parties;¹⁴³ and 3) it rejects the notion of protecting biodiversity as a common global responsibility, instead favoring the entrenchment of national sovereignty over biological resources.¹⁴⁴

By adopting the CBD, governments created a myth that action is underway to stem biodiversity loss by means of an international agreement, while in reality the agreement cannot “deliver the goods.” As demonstrated by the above review, the amorphous nature of the CBD’s obligations for biodiversity conservation makes compliance verification an almost impossible feat. More significantly, the CBD does not address the underlying causes of biodiversity loss.¹⁴⁵ Thus, strengthening compliance with the CBD to reverse ongoing biodiversity loss, as the

effective.”). *See also supra* text accompanying note 133.

141. Guruswamy, *supra* note 13, at 351.

142. *Id.* at 352.

143. *Id.* at 354.

144. *Id.* at 355. *See also* TONY BRENTON, *THE GREENING OF MACHIAVELLI: THE EVOLUTION OF INTERNATIONAL ENVIRONMENTAL POLITICS* 248 (1994) (“The fact is (as a group of key developing countries have consistently emphasized) that we are talking here about conservation of resources within natural borders.”); Ivanova & Roy, *supra* note 3, at 63 (“National sovereignty in the face of global environmental problems has also proven a difficult obstacle to effective solutions as governments have been driven to act on the basis of narrowly defined self-interest rather than the common good.”). *But cf.* Christopher Stone, *What to do About Biodiversity: Property Rights, Public Goods, and the Earth’s Biological Riches*, 68 S. CAL. L. REV. 577, 586-587 (1995) (discussing “biological assets that afford positive externalities” and using a forest as an example “by sequestering carbon, and thereby tempering the risks of climate change damage, the forest provides a benefit that radiates across the globe.”).

145. *But see* Decision VI/26, *supra* note 14, paras. 1(a), 7(a) (recognizing the lack of political will, poverty, unsustainable population growth, consumption, and production patterns as obstacles to implementation). *See also* Speth, *International Environmental Law: Can it Deal with the Big Issues?*, *supra* note 2, at 780.

UNEP document proposes regarding MEAs in general, is contradicted by the agreement's own text.

The CBD's format is also linked to its failure to achieve substantive gains in protecting biodiversity. The CBD is a multilateral framework agreement consisting primarily of general obligations that could evolve into binding commitments by means of protocols.¹⁴⁶ Examples of framework agreements which spun off binding protocols are the Vienna Convention for the Protection of the Ozone Layer¹⁴⁷ and the Montreal Protocol,¹⁴⁸ the United Nations Convention on Climate Change¹⁴⁹ and the Kyoto Protocol,¹⁵⁰ and, as will be discussed below, the Barcelona Convention and its protocols. This paradigm—a general and “softly” binding framework agreement used as the functioning basis for a binding protocol¹⁵¹—has been prescribed by Abram and Antonia Chayes as a cooperative tool for international legal action in the absence of agreement.¹⁵²

1. From the Perspective of the “Managerial Model”

The framework agreement-protocol format, which demonstrates the evolving process of achieving international agreement on shared norms, embodies the “managerial model” of compliance theory for international

146. *See supra* text accompanying notes 120, 122.

147. Vienna Convention for the Protection of the Ozone Layer, Mar. 22, 1985, 1513 U.N.T.S. 293 (entered into force Sept. 22, 1988).

148. Montreal Protocol, *supra* note 20.

149. UNFCCC, *supra* note 59.

150. Kyoto Protocol, *supra* note 20; Crossen, *supra* note 19, at 475 (“In contrast to the UNFCCC, which merely encouraged Parties to stabilize greenhouse gas emissions, the Kyoto Protocol sets quantifiable green-house emission limitation and reduction commitments for certain developed country Parties.”). *See also* Wang & Wiser, *supra* note 117, at 184.

151. CHAYES, *supra* note 22, at 16, 226 (discussing the above MEAs as examples of framework agreements). *See also* Brett Hendricks, *Transformative Possibilities: Reinventing the Convention on Biological Diversity*, in Guruswamy, *supra* note 13, 360, 364.

152. CHAYES, *supra* note 22, at 225–26. *But see id.* at 226 (“It does not, however, avoid the burden of repeated negotiation and ratification of the protocols.”); Jutta Brunnee & Stephen Toope, *Environmental Security and Freshwater Resources: Ecosystem Regime Building*, 91 AM. J. INT’L L. 26, 28, 29 (1997) (elaborating on this format in the context of regime formation, defining it as the “contextual convention-protocol” model. “Our hypothesis is that the insights of regime theory help to explain how binding legal norms may emerge from patterns of expectation developed through coordinated discussions and actions of states in given issue-areas.” This Article takes “an approach to regime formation and elaboration that posits a continuum between contextual regimes and legal regimes . . . we also suggest that the framework-protocol approach . . . is the most suitable model . . .”).

law, and contrasts with the “enforcement model.”¹⁵³ The managerial model addresses the oft-asked question of why states comply with international law¹⁵⁴ and provides valuable insight—if not a solution—to why the CBD contains qualified and vague provisions. The model also addresses why the CBD has not yet evolved specific, unambiguous, and “hard law” protocols, explaining that the CBD’s structure of general principles and ambiguous commitments was designed primarily for “problem identification, fact finding and agenda setting.”¹⁵⁵ In accordance with the managerial model, Article 28 of the CBD, in contrast to its other vague obligations, unambiguously prescribes its parties to “cooperate in the formulation and adoption of protocols to this Convention.”¹⁵⁶ Article 28 perhaps reveals the state of mind of the CBD negotiators. Faced with the reality of wide gaps in the positions of the participating states, an obstacle to the adoption of binding commitments, they intentionally designed a general framework agreement, charging the parties to continue the work by means of the protocol mechanism.¹⁵⁷ So far, only one protocol has been adopted by the parties to the convention,¹⁵⁸ which can be explained by the above model as the parties reaching consensus in that specific area, biosafety, but not yet in others.

In line with the managerial model’s approach to treaty making, the CBD does not contain compliance mechanisms, since they were intended

153. CHAYES, *supra* note 22, at 3 (“As against this ‘enforcement model’ of compliance, this book presents an alternative ‘managerial model.’”); Crossen, *supra* note 19, at 481; Andrew Guzman, *A Compliance-Based Theory of International Law*, 90 CALIF. L. REV. 1823, 1830 (2002).

154. *See* Crossen, *supra* note 19, at 474.

155. RED SKY AT MORNING, *supra* note 2, at 92.

156. CBD, *supra* note 11, art. 28 (note that CBD Article 23.4(c) commits the parties to “[c]onsider and adopt, as required, protocols in accordance with Article 28.”).

157. *See* McGraw, *supra* note 13, at 20–21 (describing framework conventions as agreements that do not establish substantive rules, but rather institutional frameworks for producing substantive rules). *See also* Alexandre Kiss, *Commentary and Conclusions, in* COMMITMENT AND COMPLIANCE 223, 225 (Dinah Shelton ed., Oxford University Press 2003) (“[U]nder the leadership of UNEP, non-binding regimes in several fields have evolved into binding treaties, reflecting a belief that legal form does make a difference and that non-binding instruments can facilitate the achievement of consensus on hard law content.”).

158. Cartagena Protocol, *supra* note 20 (note that the Protocol deals not directly with biodiversity but with biosafety. It has adopted a compliance mechanism at art. 34 requiring that “[t]he Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first meeting, consider and approve cooperative procedures and institutional mechanisms to promote compliance with the provisions of this Protocol and to address cases of non-compliance. These procedures and mechanisms shall include provisions to offer advice or assistance, where appropriate. They shall be separate from, and without prejudice to, the dispute settlement procedures and mechanisms established by Art. 27 of the Convention.”).

to evolve at the protocol-making stage,¹⁵⁹ which would occur if and when the parties succeed in raising the lowest common denominator¹⁶⁰ embodied in the framework agreement. This adoption of compliance mechanisms is contingent on the parties arriving at shared norms, a result, according to the managerial model, of repeated interactions among the parties. This interaction is “a discursive process of explanation, justification and persuasion”¹⁶¹ intended to lead to the convergence of understandings, expectations, and interpretations, with the goal being voluntary compliance with the agreement.¹⁶²

The Chayes consider environmental degradation an example of the interdependency of states in attaining goals that can only be achieved collectively. Theoretically, the recognized need for collective behavior—for instance, in repairing the ozone layer or eliminating green house gases—surmounts considerations of national sovereignty, and will ensure compliance with international law without the need to resort to enforcement measures. Abram and Antonia Chayes argue for a “new sovereignty”¹⁶³ that demands coordinated action and cooperation in addressing environmental degradation and persuades states to forego traditional concepts of sovereignty.

However, as attested to by the worsening state of biodiversity worldwide,¹⁶⁴ the framework agreement-protocol model is not working in the case of biodiversity loss. Generally phrased and qualified obligations when used as a framework for persuading states to restore ecosystems, protect species, and eradicate alien species have failed to stop biodiversity loss. If the CBD has not evolved from the stage of the framework agreement into the subsequent stage of protocols either because its parties cannot agree on action to stop biodiversity loss¹⁶⁵ or

159. *See, e.g., id. See also* Brunnee & Toope, *supra* note 152, at 57 (“[W]e suggest further that in the early stages of regime formation, explicit attempts to define noncompliance for the purposes of penalties be avoided *As contextual regimes evolve into legal frameworks, formal mechanisms to promote compliance may become appropriate.*”) (emphasis added).

160. *See* DiMento *supra* note 133, at 275. *See also* Bodansky, *supra* note 28, at 607 (in discussing consensus decision making, arguing that “agreements must either represent the least-common denominator, and thus be weak”); Dunoff, *supra* note 3, at 270 (“The mere fact of international agreement does not, by itself, mean that the agreement will actually help to abate a particular environmental problem, as political agreements can simply ratify the status quo. More likely, in an attempt to satisfy and include as many nations as possible, treaties often reflect the ‘lowest common denominator.’”).

161. CHAYES, *supra* note 22, at 127.

162. *Id.* at 25, 127. *See also* DiMento, *supra* note 133, at 256 (“Norms are created and/or become shared, through interactions among participants.”).

163. CHAYES, *supra* note 22, at 119.

164. MILLENNIUM ECOSYSTEM ASSESSMENT, *supra* note 38, at 3.

165. *See* RED SKY AT MORNING, *supra* note 2, at 101.

are lacking the necessary political will to deal with its underlying drivers, should we wait patiently until states reach agreement on more binding norms? Or perhaps multilateral framework agreements, created for global collective action problems, are fundamentally not conducive to solving problems that can be addressed by unilateral state action.¹⁶⁶ In contrast to the “new sovereignty” that assumes the need for cooperation in solving international issues, states are unconstrained from unilaterally protecting biodiversity located within their territorial borders. It may be that states have not yet advanced the CBD framework agreement to the protocol stage because they do not need binding protocols to protect their own biodiversity, and do not want them because they impinge upon national sovereignty.

2. *From the Perspective of the “Shallow Cooperation–Deep Cooperation”*

To gain further insight, we can view the CBD from the opposite end of the compliance spectrum, from the perspective of the enforcement model.¹⁶⁷ The “shallow cooperation–deep cooperation” theory of compliance with international law was developed by the political scientist George Downs and his colleagues¹⁶⁸ in response to empirical research that indicated good compliance levels for international agreements, ostensibly achieved without the need for enforcement measures.¹⁶⁹ While the original goal of the theory was to prove the need for sanctions in achieving compliance with international obligations,¹⁷⁰ Downs argues that since international agreements are based on consent amongst their state parties, the standard of behavior to which the parties will agree will not greatly exceed (if at all) those standards followed by the parties on a domestic level, thus ensuring compliance without those additional costs involved in meeting more demanding and effective

166. *See id.* (“The world fell easily into the treaty-protocol approach without much thinking either about alternatives or about how to make legal regimes succeed Heavy reliance on the convention-protocol model . . . fared less well when applied to bigger problems like desertification, biodiversity, and climate change that are much more complicated and deep-rooted socially and economically.”). *See also* Breitmeier et al., *supra* note 20, at 68 (“Examples of less successful regimes include the biodiversity regime, the desertification regime, the Ramsar regime for wetlands, and the tropical timber regime.”).

167. *See supra* text accompanying note 153.

168. *See* George W. Downs, David M. Roake & Peter N. Barsboom, *Is the Good News About Compliance Good News About Cooperation?*, 50 INT’L ORG. 379, 380 (1996).

169. *See id.* at 379-81 (critiquing the managerial model of compliance).

170. *Id.* at 380, 395.

standards.¹⁷¹ Hence, international agreements tend to be weak since states will not consent to commitments requiring compliance “deeper” than their current domestic level.¹⁷² Downs defines the extent to which a state is willing to undertake an international obligation as the “depth of cooperation,” being “the extent to which it [the treaty] requires states to depart from what they would have done in its absence.”¹⁷³ Thus, weak agreements reflect “shallow cooperation” while strong agreements reflect “deep cooperation.”

The “shallow cooperation–deep cooperation” theory sheds light on alleged insufficient implementation and compliance concerning the CBD. The “shallow” commitments the CBD imposes on its parties reflect the unwillingness of states to address biodiversity loss thus explaining the commitments’ ineffectiveness, while the arrest and reversal of biodiversity loss requires imposing “deeper” obligations on parties. In light of the discussion on collective action versus unilateral state action,¹⁷⁴ creating incentives to encourage states to undertake meaningful action to stop biodiversity loss is inherently problematic because states do not require the cooperation of other states in protecting their own biodiversity, and for the most part, do not care if other states do or do not protect their own. This explains the CBD’s feeble obligations.¹⁷⁵

The “shallow” and “deep” cooperation concepts could also be a counter argument to UNEP’s position. MEAs are in fact being implemented and complied with, but since they are “shallow” agreements that do not obligate the states to do more than required at the domestic level, they have a low behavioral impact.

F. Summary

The CBD emerges from the above discussion as an international agreement purposefully designed as an elusive legal instrument that, despite its name, does not protect biodiversity sufficiently considering the gravity of the problem and its significance to life on Earth. Creating

171. *Id.* at 397–99.

172. *Id.* at 383. This finding is also based on the author’s own experience as a government lawyer dealing with ratifications of environmental treaties.

173. *Id.*

174. *See supra* text accompanying notes 166.

175. *See BREITMEIER, supra* note 20, at 110 (in critiquing Chayes and Downs, arguing that “our findings suggest that neither the shallowness argument of Downs, Roche and Barsoom (1996) nor the management approach of Chayes and Chayes (1995) can explain patterns of compliance with international environmental regimes. In our view, a composite perspective that integrates ‘incentives,’ ‘institutional design,’ ‘the rule of law,’ and ‘the power of legitimacy’ is needed.”).

effective commitments to protect biodiversity was not the main concerns of its negotiators, who, along a north/south axis, seemed to be preoccupied with its other objectives, particularly access to and sharing of the benefits of genetic resources.¹⁷⁶ Fifteen years after the CBD has entered into force, and in the face of increasing biodiversity loss—the original reason for its creation—the CBD has only one protocol, not even directly related to stopping biodiversity lost. As a basis for comparison, the following section will discuss The Barcelona Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (“Barcelona Convention”) and its establishment of a compliance mechanism to counter charges of irrelevancy and ineffectiveness.

IV. THE BARCELONA CONVENTION FOR THE PROTECTION OF THE MARINE ENVIRONMENT AND THE COASTAL REGION OF THE MEDITERRANEAN

A. Introduction

The Barcelona Convention was designed as the institutional framework to deal with the heavily polluted Mediterranean Sea and its environment. The original agreement, the Barcelona Convention for the Protection of the Mediterranean Sea against Pollution, was adopted in 1976 as the legal structure for the Mediterranean Action Plan (“MAP”), established in 1975 as the first Regional Seas Program under UNEP. MAP addresses the serious ongoing degradation of the Mediterranean.¹⁷⁷ In 1995, in line with the growing global awareness of the link between sustainable development and the environment, the original 1975 Action

176. Convention on Biological Diversity, *International Regime on Access and Benefit-sharing*, <http://www.cbd.int/abs/regime.shtml> (last visited Sept. 29, 2009) (indicating that access and benefit-sharing are currently the subjects of negotiations for a protocol).

177. See generally RACHEL CAVANAGH & CLAUDINE GIBSON, OVERVIEW OF THE CONSERVATION STATUS OF CARTILAGINOUS FISHES (CHONDRICHTHYANS) IN THE MEDITERRANEAN SEA (2007), available at <http://www.iucn.org/about/union/secretariat/offices/iucnmed/resources/publications/?404/Overview-of-the-Conservation-Status-of-Cartilaginous-Fishes-Chondrichthyans-in-the-Mediterranean-Sea>; EUROPEAN ENVIRONMENT AGENCY, EEA REPORT NO. 4/2006: PRIORITY ISSUES IN THE MEDITERRANEAN ENVIRONMENT (2006), available at http://reports.eea.europa.eu/eea_report_2006_4/en; Skjaereth, *supra* note 25, at 311 (providing scientific and technical reviews on the state of the Mediterranean). See also PETER M. HAAS, SAVING THE MEDITERRANEAN Ch. 4 (John Gerad Ruggie ed., Columbia University Press 1990) (on the establishment of the Mediterranean Action Plan).

Plan was replaced by the Action Plan for the Protection of the Marine Environment and the Sustainable Development of the Coastal Areas of the Mediterranean ("MAP Phase II").¹⁷⁸ In order to ensure that the legal structure was in tune with the new action plan, the Contracting Parties amended the 1976 Barcelona Convention at the same time and renamed it the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean.¹⁷⁹

B. The Ineffectiveness of the Barcelona Convention

The Barcelona Convention is an example of an UNEP MEA perceived as deficient in implementation and compliance.¹⁸⁰

The Mediterranean Plan achieved consensus by eliminating any meaningful restrictions on dumping and providing no enforcement mechanism for those minimal targets and restrictions that were agreed to. As a result, it has been an embarrassing failure. Pollution has increased, dolphin hunting continues, and despite a European Union ban on drift nets longer than 2.5 kilometers, the rules are widely flouted. The result has been a collapsing ecosystem in the Mediterranean.¹⁸¹

A salient factor creating this reputation is the Convention's poor reporting record, which has become a chronic problem. The intentional dearth of implementation and compliance data conveyed by state parties to the Convention's Secretariat constrains the assessment of state party behavior as a factor in the ongoing environmental degradation of the Mediterranean.¹⁸² Jon Skjaereth, in his research on the effectiveness of

178. U.N. Env't Programme, Mediterranean Action Plan for the Barcelona Convention, <http://www.unepmap.org/index.php?module=content2&catid=001001004> (last visited Sept. 29, 2009).

179. *Id.*

180. *See infra* text accompanying notes 181–186.

181. Downs, *supra* note 168, at 396. *See also* U.N. Env't Programme, Meeting of MAP Focal Points, Athens, Greece, Sept. 21–24, 2005, *External Evaluation of the Mediterranean Action Plan (MAP): Executive Summary*, para. 15, U.N. Doc. UNEP(DEC)/MED WG.270/8 (July 18, 2005) [hereinafter *External Evaluation*] ("While the Mediterranean Sea and its coastal zone still suffer from serious problems and their long-term sustainability is not yet fully secured."); EDWARD L. MILES ET AL., ENVIRONMENTAL REGIME EFFECTIVENESS viii (Massachusetts Institute of Technology Press 2002) (classifying the Barcelona Convention as "a regime of low effectiveness"); U.N. Env't Programme, Meeting of MAP Focal Points, Athens, Greece, Sept. 21–24, 2005, *Summary of National Reports on the Implementation of the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean, and its Related Protocols, 2002-2003*, U.N. Doc. UNEP(DEC)/MED WG.270/Inf.5 (July 26, 2005); Skjaereth, *supra* note 25.

182. Skjaereth, *supra* note 25, at 312, 317.

the Mediterranean Action Plan from the mid 1990s, found that “measured against the background of results in terms of behavioral change provided, the MAP does not appear to be very successful.”¹⁸³ Skjaereth concludes that, “the Mediterranean states have succeeded in transforming the joint Med Plan commitments and ambitions into behavioral change at the domestic level *only to a very limited extent*.”¹⁸⁴ The above research is related in a chapter in the book *Environmental Regime Effectiveness*, which addresses the effectiveness of fourteen international regimes and divides them into three categories: effective regimes, mixed-performance regimes, and regimes of low effectiveness. The Barcelona Convention was classified in the latter category.¹⁸⁵

In November 2005, the Meeting of Contracting Parties addressed the lack of implementation of the Barcelona Convention, when it was noted in a rather understated manner that:

One of the major weaknesses of MAP was deemed to be inadequate implementation of the Barcelona Convention and its Protocols and, therefore, a lack of compliance. This, however, was not considered to be a criticism of MAP and the Coordination Unit [the secretariat], because the onus was on the Parties themselves to implement the provisions of the instruments. Nevertheless, it was necessary to improve compliance monitoring and the initiative to establish a mechanism for doing so was warmly supported.¹⁸⁶

C. External Evaluation of MAP

Arguably, criticism of the Barcelona Convention was the primary factor behind the decision to perform an independent evaluation of MAP at the Meeting of the Contracting Parties in 2003.¹⁸⁷ The evaluation report, issued in 2005, indicated that MAP “has come to be synonymous

183. *Id.* at 312. (noting, however, that “the Med Plan has probably been important because it has increased the general awareness and preparedness in the Mediterranean area by increasing knowledge and cooperation.”).

184. *Id.* at 326.

185. *Id.* at 38, 312.

186. *Report of the Fourteenth Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean*, Portoroz, Slov., Nov. 8–11, 2005, para. 99, U.N. Doc. UNEP(DEPI)/MED IG. 16/13 (Nov. 30, 2005) (implying that the Coordinating Unit (the Secretariat) of the Convention felt itself on the line because of the regime’s poor compliance record).

187. U.N. Env’t Programme, Launch Meeting on the External Evaluation of MAP, Athens, Greece, Dec. 9–10, 2004, *External Evaluation of the Mediterranean Action Plan (MAP): Approach and Methodology*, para. 1, U.N. Doc. UNEP(DEC)/MED WG.261/3 (Dec. 20, 2004).

of dispersed and weak action”¹⁸⁸ and that generally the Convention lacks focus and clarity.¹⁸⁹ The report hints that the Convention is irrelevant, stating that it operates “without the necessary degree of innovation to respond [to] the challenges of the present times . . . the pace is too slow . . . [t]he convention process needs to reinforce its political clout,” and that it is “perceived as ‘not doing any harm’ and as having limited potential for generating significant benefits”¹⁹⁰ The report further noted the importance of ensuring that the convention is relevant to all parties and of the demand for “more on-the-ground action.”¹⁹¹ The evaluators observed that the convention is largely ignored by key government ministries, particularly by ministries of foreign affairs.¹⁹² The ministries used terms such as “not particularly vibrant”¹⁹³ and “dusty”¹⁹⁴ to portray the Convention, and also described the Secretariat as playing “a timid role in the overall Convention process.”¹⁹⁵ The report also criticized the Convention for not ensuring implementation of the Contracting Parties’ resolutions, noting that lack of implementation impacts on the convention’s credibility.¹⁹⁶ It was further determined that “[c]ompliance continues to be a pending issue”¹⁹⁷ and that “[t]he establishment of a compliance mechanism should constitute a high priority.”¹⁹⁸

D. The Establishment of a Compliance Mechanism

In addition to their reputations as weak MEAs, another characteristic shared by the Barcelona Convention and the CBD is that both are framework agreements. The text of the Barcelona Convention is evocative of the CBD by consisting of vague and qualified commitments, such as “appropriate measures,”¹⁹⁹ “to the fullest possible extent,”²⁰⁰ and “in accordance with their capabilities.”²⁰¹ But there are also substantial

188. See *External Evaluation*, *supra* note 181, para. 19.

189. *Id.* para. 21.

190. *Id.* paras. 21-22.

191. *Id.* para. 35.

192. *Id.* para. 22.

193. *Id.* para. 21.

194. *Id.* para. 26.

195. *Id.* para. 24.

196. *Id.* paras. 23, 54.

197. *Id.* para. 25.

198. *Id.* para. 42.

199. See, e.g., Barcelona Convention, *supra* note 20, arts. 4, 5, 7, 8, 10, 11.

200. *Id.* arts. 5, 6, 7, 8, 11.

201. *Id.* art 4. 3 (a). But see Wold, *supra* note 13, at 15-17 (noting that qualified commitments are difficult to implement, but they are still binding and they reflect the

differences between the two treaties. In contrast to the CBD, the Barcelona Convention refers to compliance. From the original text of the 1976 Convention, Article 21, entitled “Compliance Control,”²⁰² was amended and strengthened in 1995, unambiguously requiring the Meeting of the Contracting Parties in their biennial meetings to assess compliance.²⁰³ At the thirteenth Meeting of the Contracting Parties in 2003—the same meeting which called for an external evaluation of MAP—the parties decided to establish a working group mandated to consider a mechanism for improving compliance.²⁰⁴ During its four meetings extending from 2004 to 2007, the working group devised a proposal for “procedures and mechanisms on compliance under the Barcelona Convention and its Protocols.” It was accepted by a decision at the fifteenth Meeting of the Contracting Parties in January 2008,²⁰⁵ thus establishing the compliance mechanism for the Barcelona Convention.

While comparing the Barcelona Convention’s compliance mechanism to the “compliance-less” CBD, the Barcelona Convention is marked by two characteristics that are lacking in the CBD. First, Article 27 of the amended text is the basis of the MOP’s authority to assess compliance, thus granting “legal legitimacy”²⁰⁶ for a compliance mechanism. The second characteristic is the Convention’s protocols, which provide indicators for determining a state’s level of compliance. Despite its reputation as an “ineffective” MEA on implementation and compliance issues,²⁰⁷ the Barcelona Convention was successful in leading the Contracting Parties to negotiate and adopt seven protocols,

differing capacities of the parties). *See also supra* text accompanying notes 133–140.

202. Barcelona Convention, *supra* note 20, art. 21.

203. *Id.* art. 27.

204. Meeting of the Parties to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean, Catania, Italy, Nov. 11-14, 2003, *Report of the Thirteenth Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea Against Pollution and its Protocols*, annex III, sec. I.A.1.4, U.N. Doc. UNEP (DEC)/MED IG. 15/11 (Dec. 9, 2003) available at http://195.97.36.231/acrobatfiles/03IG15_11_eng.pdf. *See also* U.N. Env’t Programme P Launch Meeting on the External Evaluation of MAP, *supra* note 187.

205. *See* Fifteenth Meeting of the Parties to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean, Almeria, Spain, Jan. 15–18, 2008, *Report of the Fifteenth Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Marine Environment of the Coastal Region of the Mediterranean and its Protocols*, Decision IG 17/2 U.N. Doc. UNEP(DEPI)/MED IG. 17/10 (Jan. 18, 2008), available at http://195.97.36.231/acrobatfiles/08IG17_10_eng.pdf.

206. *See* Bodansky, *supra* note 28, at 605 (discussing authority exercised at the international level by institutions, indicating that the concept of “legal legitimacy . . . connects an institution’s continuing authority to its original basis in state consent.”).

207. *Supra* text accompanying notes 181-186.

each dealing with a specific issue concerning the ecological integrity of the Mediterranean.²⁰⁸ For example, the Land Based Sources Protocol,²⁰⁹ which requires state parties to set up regulatory systems for discharges to the Mediterranean from land based sources,²¹⁰ obligates its parties to “establish appropriate sanctions in case of non-compliance with the authorizations and regulations and ensure their application.”²¹¹ The Dumping Protocol goes even further by totally prohibiting the dumping of any substance except those listed,²¹² which are also subject to a regulatory system,²¹³ thus facilitating verification of compliance. In contrast to the more qualified and vague Convention text, the language of the protocols employs limited use of qualifying terms and conditional clauses.²¹⁴ These protocols have moved the Barcelona Convention from the framework agreement stage into the protocol stage, displaying an

208. U.N. Env't Programme, Mediterranean Action Plan for the Barcelona Convention, *supra* note 178, Protocols, (The Offshore Protocol and the ICZM are not yet in force. The Dumping Protocol and the Land-based Sources and Activities Protocol are amended versions of the original protocols from 1976 and 1980, respectively. The amended Land Based Sources Protocol entered into force on May 8, 2008.). *See also* Skjaerseth, *supra* note 25, at 316 (“To fulfill the goal of the Barcelona Convention . . . two protocols were adopted in 1976 . . . in 1980 . . . states . . . signed the Protocol on Land Based Sources . . . [t]wo years later, the Mediterranean states approved a protocol aimed at creating a network of specially protected areas . . .”).

209. *See* Conference of Plenipotentiaries on the Protocol for the Protection of the Mediterranean Sea Against Pollution from Land-based Sources, Syracuse, Italy, Mar. 6–7, 1996, *Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities*, U.N. Doc. UNEP(OCA)/MED IG. 7/4) (Mar. 15, 1996), available at http://195.97.36.231/dbases/webdocs/BCP/ProtocolLBS96_eng_P.pdf.

210. *Id.* art. 6.1 (“Point source discharges into the Protocol Area, and releases into water or air that reach and may affect the Mediterranean Area . . . shall be strictly subject to authorization or regulation by the competent authorities of the Parties, taking due account of the provisions of this Protocol and annex II thereto, as well as the relevant decisions or recommendations of the meetings of the Contracting Parties.”).

211. *Id.* art. 6.4.

212. Conference of Plenipotentiaries on the Protocol for the Prevention and Elimination of Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft, Barcelona, Spain, June 10, 1995, *Protocol for the Prevention and Elimination of Pollution of the Mediterranean Sea by Dumping from Ships and Aircraft or Incineration at Sea*, art. 4.1, available at http://195.97.36.231/dbases/webdocs/BCP/ProtocolDumping95_Eng_pdf (“The dumping of wastes or other matter, with the exception of those listed in paragraph 2 of this Art, is prohibited.”) (not yet in force).

213. *Id.* art. 5 (“The dumping of the wastes or other matter listed in Article 4.2 requires a prior special permit from the competent national authorities.”).

214. *See, e.g.*, Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities, *supra* note 209, art. 5.1 (“The Parties undertake to eliminate pollution deriving from land-based sources and activities, in particular to phase out inputs of the substances that are toxic, persistent and liable to bioaccumulate listed in annex I.”).

ostensibly high degree of consensus among the state parties on action necessary to clean up the Mediterranean.

In comparison, the lack of precise and unqualified performance obligations in the CBD constitutes a major obstacle to implementation and compliance,²¹⁵ which the Barcelona Convention overcame by investing in protocol making.²¹⁶ However, the salient difference between the two agreements is that the Barcelona Convention addresses the environmental degradation of a global, or at least regional, commons, the Mediterranean,²¹⁷ while the CBD addresses biodiversity loss, considered a domestic natural resource over which states have sovereign rights. Dealing with a global commons that requires collective action to protect, the framework agreement-protocol format proved to be an efficient mechanism for the adoption of seven protocols. The same format did not produce similar results for the CBD; and debatably, the underlying reason is that unlike the Mediterranean, each state can protect its own biodiversity independently of other states. Thus incentives for cooperation like those leading to the Barcelona Convention's protocols, do not exist for biodiversity loss under the CBD.

V. COMPLIANCE MECHANISMS, LEGITIMACY, AND THE HANDICAP PRINCIPLE

Up to this point, perhaps it could be understood that the decision of the Barcelona Convention's contracting parties to establish a compliance mechanism followed standard form. The formal, legal authorization was in place prior to the creation of a substantial body of protocols containing precise performance standards. Drawing on the framework agreement-protocol model, the establishment of a compliance mechanism for the Barcelona Convention signified the convergence of norms in the form of

215. This holds true regarding compliance with the Barcelona Convention itself. For during the working group's deliberations on compliance procedures, an argument was raised concerning the viability of assessing compliance with the Convention due to its general obligations that do not prescribe specific norms of behavior (the author in recounting her experience as a member of the working group for the compliance mechanism).

216. Although their implementation remains problematic, based on the author's personal experience.

217. *But see* HAAS, *supra* note 177, at 70-71 ("Many officials thought that pollution was a common problem and thus required coordinated action throughout the region . . . only later did studies reveal to marine scientists that currents were too weak to fully exchange the wastes between the northern and southern shores: regional pollution was not a true collective good, and it could be managed bilaterally or subregionally.").

protocols, and supports the argument that the CBD is “unimplementable” because of its lack of binding protocols.

Yet why did the state parties to the Convention, operating collectively as an organ of the Convention, *agree* to establish a compliance mechanism? Attempting to understand the significance of the Barcelona Convention’s decision in establishing a compliance mechanism can perhaps disclose factors relevant to the lack of such a mechanism in the CBD. Two factors shed light on this question. The first factor is the timing. The decision to establish a compliance mechanism was taken at the same Meeting of the Contracting Parties, as the decision to perform an external evaluation of MAP.²¹⁸ The second factor, linked to the first, was the sense that there was no choice but to establish a compliance mechanism because of repeated criticism of the convention and the ongoing and worsening environmental degradation of the Mediterranean area.²¹⁹

The most apt verb to describe the Convention’s actions under these circumstances is “signaling.” The Convention was signaling that it is, or intends to be, a strong and effective agreement by establishing an autonomous mechanism to ensure implementation and compliance. Following criticism of its ineffectiveness, and veiled hints of irrelevancy,²²⁰ the Barcelona Convention attempted to justify its authority as an international regime charged with protecting a common resource, the Mediterranean Sea. Its goal was to signal legitimacy.

218. See *Report of the Thirteenth Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea Against Pollution and its Protocols*, *supra* note 204, annex III, sec. I.A.1.4 (“To approve the establishment of a Working Group . . . to elaborate a platform to promote the implementation of and compliance with the Barcelona Convention”), and I.A.2.1. (“To launch the external overall evaluation of MAP”).

219. See *supra* note 181 and accompanying text (on the state of the Mediterranean). See also Launch Meeting on the External Evaluation of MAP, Athens, Greece, Dec. 9–10, 2004, *Report of the Launch Meeting on the External Evaluation of MAP*, annex III, U.N. Doc. UNEP(DEC)/MED WG.261/4 (Dec. 21, 2004), available at http://195.97.36.231/acrobatfiles/04WG261_4_eng.pdf (containing the Opening Statement of Mr. Paul Mifsud, MAP Coordinator, at the meeting to launch MAP’s external evaluation. While not specifically referring to the ongoing degradation of the Mediterranean, the MAP coordinator notes that MAP is in a crisis, critical issues being lack of implementation and lack of ratification of the amended protocols, both which affect the regime’s “credibility.” He further notes the need for a compliance mechanism: “MAP’s credibility rests on the implementation of its legal instruments One way of ensuring implementation is to have in place a compliance mechanism. They go hand-in-hand. Unlike other Conventions there is no compliance mechanism in place under the Barcelona Convention.”). Based also on information that the author had received as a member of the working group on establishing a compliance procedure.

220. See *supra* text accompanying note 190-195.

“What is legitimacy? And why is it important?” Daniel Bodansky raises these questions in his article *The Legitimacy of International Governance: A Coming Challenge for International Environmental Law?*²²¹ Bodansky defines legitimacy as “a quality that leads people (or states) to accept authority . . . because of a general sense that the authority is justified.”²²² The more an institution is perceived as legitimate, the more effective it will be. Bodansky argues that as environmental problems become more severe and require tougher measures, consensus as the basis for decisions will be surpassed by the need for hierarchical structures of decision making, and thus consent as the traditional source of legitimacy for international environmental law will not suffice.²²³ Bodansky considers “source-based, procedural, and substantive” foundations of legitimacy for such rulemaking institutions.²²⁴ The substantive effectiveness of a particular institution, in solving the environmental problem that it was created to solve, can also be a basis for legitimacy. In other words, effectiveness is a legitimizing factor. Conversely, the Barcelona Convention’s failure to stop the degradation of the Mediterranean led to accusations of ineffectiveness, which lead to the public perception of the regime as lacking relevancy, which in turn cast shadows on its legitimacy.²²⁵

While Bodansky explores the legitimacy of international institutions, the Chayes and Franck address the legitimacy of rules and norms in the context of the question of why states comply with international law.²²⁶ The Chayes contend that, “the claim of the norm to obedience is based in significant part on its legitimacy.”²²⁷ They define legitimacy as “fairness” which plays a major role in the managerial model of compliance theory for international law, in which compliance is achieved not by coercive sanctions but by “explanation, justification and persuasion.” Corresponding to Bodansky by identifying procedures as a

221. Bodansky, *supra* note 28, at 600, 602 (“[L]egitimacy refers to the justification of authority Legitimacy . . . represents a potentially important basis of effectiveness, in addition to power and self-interest. As Weber emphasized, the more an institution is perceived as legitimate, the more stable and effective it is likely to be.”).

222. *Id.* at 600–601.

223. *Id.* at 623. *See also id.* at 624 (“Unless some other basis of legitimacy can be found, the continuing centrality of state consent . . . is likely to limit the possibilities of international governance.”).

224. *Id.* at 612.

225. *Id.*

226. *See* Harold Koh, *Why Do Nations Obey International Law?*, 106 *YALE L.J.* 2599, 2628–2633, 2635–2645 (1997) (providing a discussion and critique of the Chayes’ and Franck’s theories on why states comply with international law, including legitimacy as a factor in compliance).

227. CHAYES, *supra* note 22, at 127.

source of legitimacy for international institutions,²²⁸ the Chayes argue that fair and accepted procedures, from which the norm originates, are a factor in its legitimacy.²²⁹ Legitimacy is a characteristic that increases over time, as part of the evolving discursive process of explanation, justification, and persuasion that leads to accepted norms.²³⁰ Similarly to the Chayes, Thomas Franck defines legitimacy as “a property of a rule or rule-making institution which itself exerts a pull towards compliance on those addressed normatively because those addressed believe that the rule or institution has come into being and operates in accordance with generally accepted principles of right process.”²³¹ Thus, in the context of the Barcelona Convention, by deciding on a compliance mechanism, the Meeting of the Contracting Parties intended to establish a procedure that would exert a compliance pull on its addressees, the state parties.

One support for the thesis that the Barcelona Convention was indeed signaling legitimacy, as defined above, is a model for animal behavior developed by Israeli biologists Avishag and Amotz Zahavi for explaining gazelle behavior in facing off their predators, known as the handicap principle.²³² They observed that gazelles engaged in behavior called “stotting”:

We start with a scene of a gazelle resting or grazing in the desert . . . [a] wolf appears. One would expect the gazelle to freeze or crouch and do its utmost to avoid being seen. But no: it rises, barks, and thumps the ground with its forefeet, all the while watching the wolf . . . [w]hy does the gazelle reveal itself to a predator that might not otherwise spot it? Why does it waste time and energy jumping up and down (*stotting*) instead of running away as fast as it can? The gazelle is signaling to the predator that it has seen it; by wasting time and by jumping high in the air rather than bounding away, it demonstrates in a reliable way that it is able to outrun the wolf. The wolf, upon learning . . . that this gazelle is in tip-top physical shape, may decide to . . . look for more promising prey . . . The encounter between the gazelle and the wolf dramatize the basic theme of this book: in order to be effective, signals have to be reliable; in order to be reliable, signals have to be costly.²³³

228. See Bodansky, *supra* note 28.

229. CHAYES, *supra* note 22, at 127.

230. *Id.* at 128 (“Legitimacy accrues with tradition, precedent, and acquiescence, as the treaty persists over time. Acceptance ex post is assimilated to consent ex ante, and treaty norms tend to gain strength and legitimacy over time.”).

231. FRANCK, *supra* note 94, at 24.

232. See AMOTZ ZAHAVI & AVISHAG ZAHAVI, *THE HANDICAP PRINCIPLE* (1999). See also, e.g., JARED DIAMOND, *THE THIRD CHIMPANZEE* 195-200 (1992) (providing a succinct description of the Zahavis’ theory.).

233. *Id.* at xiii-xiv.

The Zahavis argue that by stotting, the gazelle is communicating to the wolf that it is strong and healthy—by investing the time and energy in jumping up and down instead of fleeing—and signaling that it can outrun the wolf, and so it would be a costly waste of time for the wolf to try to catch it.²³⁴ “According to [Zahavi’s] theory, those deleterious structures and behaviors constitute valid indicators that the signaling animal is being honest in its claim of superiority, precisely *because* those traits themselves impose handicaps.”²³⁵ This model could explicate the behavior of international environmental regimes in establishing compliance mechanisms. Comparing regimes to the stotting gazelle, the establishment and use of compliance mechanisms are costly to state parties as “handicaps, expenses, or sources of risk,”²³⁶ just as stotting is for the gazelle. Compliance mechanisms can work to the disadvantage of a party, obviously when it is in noncompliance, but even when it is in compliance. Theoretically, an unfriendly state party who has a bone to pick can trigger the compliance mechanism against another party for motives other than achieving compliance. As discussed below,²³⁷ in the horizontal structure of international law wherein states impose rules upon themselves as a collective entity and where “both governors and governed”²³⁸ are interchangeable, arguably the most significant cost of compliance mechanisms is the imposition of a decision by an autonomous mechanism on a state party without its consent, together with the consequent surrender of a commensurate amount of national sovereignty.

The Barcelona Convention had acquired a reputation as an ineffective and subsequently irrelevant regime, a reputation it perceived as a threat to its legitimacy. In an attempt to overturn its negative reputation, its Meeting of the Parties decided to adopt a compliance mechanism. In a circular path back to the UNEP document, MEAs blamed for weak implementation and compliance are signaling that they are serious and effective agreements, and have compliance mechanisms to prove it.²³⁹ Linking between compliance and legitimacy, the Chayes

234. *Id.* at 6.

235. DIAMOND, *supra* note 232, at 197.

236. *Id.*

237. *See infra* text accompanying note 241.

238. *See* Jutta Brunnee & Steven Toope, *An Interactional Theory of International Legal Obligation* 15 (U Toronto, Legal Studies Working Paper No. 08-16, 2008), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1162882 (“Within a conception of law that is non-hierarchical, not defined by the use of force, and mutually constructed by actors who may be both governors and governed (creators and subjects of law), what gives rise to a legal norm, distinguishing it from other social norms?”).

239. *See* DIAMOND, *supra* note 232, at 199 (“Zahavi’s theory can also be extended to human abuse of chemicals. Especially in adolescence and early adulthood, the age

discuss as “plausible” a case in which noncompliance could reach a point that could bring about the collapse of the regime. “States committed to the regime may sense that a tipping point is close, and that an enhanced compliance effort will be necessary to preserve the regime.”²⁴⁰ Did this happen with the Barcelona Convention? Did the states sense that the regime was threatened and even approaching the verge of collapse? And that to “preserve the regime” an “enhanced compliance effort” was in order and thus the compliance mechanism was established?

In the horizontal structure of international law, compliance mechanisms are symbolic of structures that go beyond the familiar format of consent based on general principles of state sovereignty. Instead, by agreeing to the establishment of compliance mechanisms, state parties subject themselves to decisions of an autonomous body authorized to impose its decisions on individual parties. These characteristics communicate the honesty in using the compliance mechanism as a signal, for it exposes a state party to a hierarchical structure under which it can find itself subject to a decision taken without its consent and to which it does not agree. Even if the decision is limited to sanctions as benign as submitting action plans or progress reports, that the decision was imposed upon the party involved and its consent was not required, is at least theoretically a deviation from the principles of international law.²⁴¹

Need we be wary of compliance mechanisms as the answer of international environmental legal regimes to charges of weak compliance? Are they really intended to strengthen compliance, or are they no more than signals of legitimacy desperately needed, for example, in the wake of extensive criticism of MEAs for ongoing environmental degradation they do not seem to be able to reverse? Or are these questions tautological, as by establishing a compliance mechanism of any kind—whether similar to the managerial model or to the enforcement model—the regime achieves legitimacy, which “exerts a pull” on compliance. Perhaps facilitative compliance mechanisms are sufficient to exert this “compliance pull” on their addressees, to endow

when drug abuse is most likely to begin, we are devoting much energy to asserting our status *The messages . . . remain the same: I'm strong and superior It's a message to our rivals, our peers, our prospective mates – and to ourselves.*”) (emphasis added).

240. CHAYES, *supra* note 22, at 21.

241. *See, e.g.,* Guzman, *supra* note 5, at 1833 (“[T]he most commonly held rationale for the relevance of international law to national conduct, especially in the context of treaties, is based on the notion of consent. The consent-based theory begins with the claim that states are not subject to any obligation to which they did not consent The consent-based theory only observes that states are not bound to international agreements unless they consent to them.”).

the institution of the compliance mechanism with authoritative power, backed up by force, even a facilitative force. Arguably, the significance of compliance mechanisms is that they symbolize sincerity and gravity as to improving that particular problem addressed by the regime by promising compliance,²⁴² while the burden that the compliance mechanism imposes on the state party strengthens the perception of its honesty and legitimacy. This perception of legitimacy is perhaps what the Convention on Biological Diversity lacks.²⁴³

VI. CONCLUSION

This Article was triggered by curiosity about an ostensible discrepancy between biodiversity and other MEAs, of the absence of compliance mechanisms in biodiversity agreements. Spurred by the paradox of the ongoing loss of biodiversity despite a large number of these agreements, it set out to explore why the CBD does not have a compliance mechanism. The starting point was UNEP's assertion that a major cause for ongoing environmental degradation is state failure to implement and comply with MEAs. However, the Article argues that at least as far as the CBD is concerned, lack of implementation and compliance is not a cause of biodiversity loss, but rather an indicator of the lack of consensus of states to deal with the root causes and underlying drivers of biodiversity loss, resulting in weak, "unimplementable" MEAs.

Imagining hearings before a fictitious compliance mechanism under the CBD on charges of noncompliance under Article 8 (*in situ* conservation of biodiversity) can shed light on the unwillingness of states to adopt stronger commitments for protecting biodiversity. Out of the endless list of incidents of ongoing biodiversity loss, which ones would be considered agreement violations under a more binding Article 8?²⁴⁴ Clearing of old growth forests?²⁴⁵ Of tropical forests?²⁴⁶ Degradation of

242. See FRANCK, *supra* note 94, at 98 (discussing the importance to legitimacy of adherence to formality).

243. Bodansky, *supra* note 28, at 602.

244. See *supra* text accompanying note 75-84 (discussing the weakness of art. 8).

245. Press Release, Environmental Protection Information Center, Judge Upholds Protection For Old-Growth Forests (Aug. 2, 2005), *available at* <http://www.wildcalifornia.org/pressreleases/number-64> ("The Bush administration's decision to eliminate safeguards that protected old-growth forests and associated plants and wildlife has been declared illegal by a federal judge.").

246. See Jose Rubens Morato-Leite et al., *Experience, Mistakes and Challenges: the implementation of the Convention on Biological Diversity in Brazil*, in BIODIVERSITY, CONSERVATION, LAW AND LIVELIHOODS 155, 179 (Michael Jeffery et al. eds., 2008) ("The 2004 annual deforestation rate published by the Brazilian Ministry of the Environment

coastal and marine ecosystems, including coral reef ecosystems?²⁴⁷ Mangrove ecosystems?²⁴⁸ Massive pollution of wetlands and freshwater ecosystems?²⁴⁹ Activities that threaten species and subspecies with precarious populations, such as whale,²⁵⁰ dolphin,²⁵¹ and harp seal

has revealed that approximately twenty-six thousand square kilometres of forests were destroyed between August 2003 and August 2004. This rate is the second highest in the last fifteen years, which suggests that the situation seems to be out of control.”). *See also* Julia Hayley, *Tropical Forests Felled for Biofuel, Ecologists Say*, REUTERS, Apr. 18, 2007 (citing cases of deforestation for biofuels in Indonesia, Malaysia and Brazil), available at <http://www.alertnet.org/thenews/newsdesk/L17559074.htm>; Press Release, World Resources Institute, Corruption, Lawlessness Fuel Epidemic of Illegal Logging in Indonesia (Feb. 2, 2002), available at <http://archive.wri.org/news.cfm?id=20>.

247. *See* Roger Highfield, *One Third of Coral Species Face Extinction*, TELEGRAPH, Oct. 10, 2008, available at <http://www.telegraph.co.uk/science/science-news/3346907/One-third-of-coral-species-face-extinction.html> (“The loss of reefs could have huge economic effects on food security for around 500 million people who are dependent on reef fish for food and/or their livelihoods and tourism is also likely to suffer Researchers identified the main threats to corals as climate change and local stresses resulting from destructive fishing, declining water quality from pollution, and the degradation of coastal habitats.”).

248. *See Human Activities Contributed to Nature's Ravages: Expert*, BAHRAIN TRIBUNE, Dec. 28, 2004, available at <http://www.bahraintribune.com/ArticleDetail.asp?CategoryId=3&ArticleId=55753>:

“Human activities, notably the building of coastal resorts and the destruction of natural protection, contributed to the enormous loss of life from killer tidal waves that hit the shores of the Indian Ocean after an earthquake, an environmental expert said yesterday Conservationists in India and Sri Lanka and Thailand had warned that mangroves had tremendous value for conservation and to protect the coastline, McNeely said.”).

249. *See* Tom Kenworthy, *Wetlands Restoration Efforts Gain Ground*, USA TODAY, Nov. 21, 2005, available at http://www.usatoday.com/news/nation/2005-11-21-wetlands-restoration_x.htm (“For years the two men have been sounding the alarm as southeastern Louisiana’s coastal wetlands disappeared at a rate averaging 34 square miles a year over the past half-century. But in the aftermath of Hurricanes Katrina and Rita, they hope such bold engineering ideas are gaining traction. The massive destruction brought by the two storms has focused new attention on how channeling the Mississippi River behind giant levees has jeopardized one of the world’s great wetlands systems and left New Orleans and other communities more exposed to hurricanes.”). *See also* Fred Pearce, *Bog Barons: Indonesia's Carbon Catastrophe*, TELEGRAPH, June 12, 2007, available at <http://www.telegraph.co.uk/earth/main.jhtml?xml=/earth/2007/12/06/eabog106.xml>; Kate Devlin, *Fishing Warning after Edinburgh Sewage Spill*, TELEGRAPH, Apr. 23, 2007, available at <http://www.telegraph.co.uk/earth/earthnews/3291024/Fishing-warning-after-Edinburgh-sewage-spill.html>.

250. *See* Richard Black, *Japan's Whaling Fleet Sets Sail*, BBC NEWS, Nov. 8, 2005, available at <http://news.bbc.co.uk/2/hi/science/nature/4417462.stm> (“The hunting is condemned by most conservation groups on the grounds that it is inhumane, unnecessary and may harm fragile wildlife populations.”). *See also* Nick Squires, *Japan Might Kill World's Only White Whale*, TELEGRAPH, Nov. 12, 2007, available at <http://www.telegraph.co.uk/earth/earthnews/3314125/Japan-might-kill-worlds-only-white-whale.html> (“Australians fear that the world’s only known white humpback whale

hunting,²⁵² or habitat destruction threatening species such as certain primates that have all but disappeared?²⁵³ In total, the IUCN Red List of Threatened Species lists 16,928 species threatened with extinction in 2008.²⁵⁴ All the actions mentioned above could have been considered violations under a stronger and more binding CBD. Understandably, states did not want a strong biodiversity agreement, did not want to comply with meaningful commitments, and preferred a “shallow cooperation” agreement. The ensuing reality is ongoing and devastating biodiversity loss, persistent in its insidious unraveling of life.

In the interest of maintaining life on Earth, conclusions regarding the CBD’s ineffectiveness must be drawn and, as has been suggested by others, mechanisms outside of the CBD regime should be considered as alternative means of action.²⁵⁵ Coming full circle back to the UNEP

could be slaughtered as Japan’s whaling fleet prepares to embark on its annual hunt in the Southern Ocean.”); *Norway Opens Whale-Hunting Season*, BBC NEWS, May 10, 2004, available at <http://news.bbc.co.uk/2/hi/europe/3701805.stm> (“Whaling vessels have left Norway for the Barents Sea to open this year’s whale-hunting season, defying an international moratorium and protests”).

251. See The Petition Site, *End Whale & Dolphin Slaughter in the Faroe Islands!*, available at <http://www.thepetitionsite.com/1/end-whale-dolphin-slaughter-in-the-faroe-islands> (last visited Oct. 6, 2009).

252. See Lee Carter, *Protest at Canadian Seal Hunt*, BBC LEARNING ENGLISH, Mar. 27, 2006, available at http://www.bbc.co.uk/worldservice/learningenglish/newsenglish/witn/2006/03/060327_seals.shtml (“The first few days of Canada’s seal hunt have been difficult, with angry incidents in the Gulf of St Lawrence. There have been international appeals for an end to the cull. Hunters say the number of seals taken so far has been less than in previous years because of thin ice . . . [T]he sealers are also frustrated because of a huge fall in the number of seals they are taking in comparison to previous years. Warm weather has melted the ice floes, making their task much more difficult.”).

253. See Lewis Smith, *Primates in Peril: 25 Species Facing Threat of Extinction*, TIMESONLINE, Oct. 26, 2007, <http://www.timesonline.co.uk/tol/news/uk/science/article2741670.ece>.

254. See International Union for Conservation of Nature, *The IUCN Red List of Threatened Species 2008, Number of Threatened Species by Major Groups of Organisms (1996-2008)*, available at http://www.iucnredlist.org/documents/2008RL_stats_table_1_v1223294385.pdf.

255. See, e.g., Kunich, *supra* note 13, at 100-01 (“If the current aggregation of international and domestic law has failed to prevent or halt the new mass extinction . . . is there an alternative? . . . [T]his type of standard analytical approach to legal commentary does not address the fundamental weaknesses of the entire legal structure in the . . . biodiversity context. When the underlying material is rotten, it does very little good to tighten a few loose screws.”). See also Guruswamy, *supra* note 13, at 352 (discussing social forces besides law as problem solvers, “Increasing knowledge and awareness about the dangers of extinction, educational campaigns; appeals to ethics, equity, and morals; economic incentives; and market mechanisms could preserve biodiversity without being institutionalized as law.”); Speth, *International Environmental Law*, *supra* note 2, at 793; Swanson *supra* note 68.

document, as the United Nations organization charged with environmental issues, UNEP should be focusing on the underlying drivers of ongoing biodiversity loss rather than being waylaid by what appears as noncompliance with MEAs. The CBD's usefulness as a tool for stopping biodiversity loss is a governmentally-created myth of action while the wave of extinction swells and surges forward, leaving a biodiversity-poor Earth in its wake. Arguing that non-implementation of and noncompliance with MEAs is a cause of ongoing environmental degradation is simply missing the point as far as biodiversity loss is concerned. This faulty argument will lead to the investment of UNEP's meager resources in strengthening implementation and compliance while the problem lies in the agreements themselves.

Notes & Comments

Keeping BPA From Baby: Why the Endocrine Disruptor Bisphenol-A Should be Banned From Products for Infants and Children

Michelle Crozier-Haynes*

ABSTRACT

Scientists are increasingly concerned about the harmful, endocrine-disrupting health effects of Bisphenol-A (“BPA”), a chemical found in many consumer products including infant formula cans and baby bottles. Young children and infants are considered particularly vulnerable to these harms. In reaction, the international community has considered a range of actions, from voluntary reductions to outright bans of BPA in some products, particularly baby bottles and other drinking containers. A patchwork of bans has been enacted at the state and local level, and manufacturers have agreed to voluntarily remove BPA from baby bottles. This piecemeal approach creates uncertainty about product safety. Placing the burden of proof on manufacturers to demonstrate the safety of products containing BPA would best protect consumer safety. Therefore, the United States and the international community should adopt the precautionary principle and ban BPA products for infants and children.

I. INTRODUCTION

Bisphenol-A (“BPA”) is an endocrine disruptor found in many consumer products including infant formula cans and bottles. It may be affecting the reproductive and metabolic health of infants and children. While some uncertainty exists about its effects, there is sufficiently sound scientific evidence that BPA is harmful to merit a ban from infant and children’s products. By adopting the precautionary principle, these measures would protect our most vulnerable population from harm as evaluation of BPA’s safety continues.

BPA is a high-production volume chemical, meaning it is used extensively in plastics production; it is used as a liner in most tin cans including infant formula cans, and in baby bottles, sippy cups, dental sealants, and bicycle helmets.¹ BPA is not acutely toxic, meaning that poisonous effects do not occur following a single exposure. Instead, BPA is an endocrine disruptor, an agent which acts like a hormone inside the body and interferes with natural physiological processes. Scientists are increasingly concerned about the effects of low-level BPA exposure on the correct functioning of hormones, especially during early stages of development.² Infants are considered a particularly susceptible risk group. In animals, BPA has been linked to various reproductive, neurodevelopmental, and metabolic problems. Epidemiological studies, which focus on health effects in human populations, have found correlations between higher levels of BPA and more of these physiological effects, as well as higher levels of heart disease. However, these studies are highly contested by plastics industry leaders.

Many countries are currently evaluating their response to the regulation of BPA. Canada has banned BPA for various products including baby bottles. In Japan, manufacturers have instituted a voluntary reduction on the use of BPA in food containers. Following the

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1. See generally NAT’L TOXICOLOGY PROGRAM, U.S. DEP’T. OF HEALTH & HUMAN SERVICES, NTP-CERHR EXPERT PANEL REPORT FOR BISPENOL A (Nov. 26, 2007), available at <http://cerhr.niehs.nih.gov/chemicals/bisphenol/BPAFinalEPVF112607.pdf> [hereinafter NTP EXPERT PANEL REPORT] (description of NTP and significance of this report *infra* Section IIIA).

2. See ENVTL. WORKING GROUP, BISPENOL A: TOXIC PLASTICS CHEMICAL IN CANNED FOOD: A SURVEY OF BISPENOL A IN U.S. CANNED FOODS (2007), available at <http://www.ewg.org/book/export/html/20928> [hereinafter EWG REPORT].

voluntary reduction of BPA, Japanese BPA body burdens, the amount of a substance found in each human body³ have declined as well. To date, the United States and the European Union (the “EU”) currently hold that the use of BPA is acceptable. In addition, despite recent voluntary production of BPA-free plastic bottles in the United States, baby bottles containing BPA continue to be produced internationally.

In the United States, there is a movement to remove BPA from food containers, beverage containers, and products for infants and children under age three. In August 2008, the U.S. Food and Drug Administration (“FDA”) reiterated its intention not to regulate BPA in food and beverage containers. In response, in 2009, the states of Minnesota and Connecticut, as well as local governments in Chicago, Illinois and Suffolk County, New York, all instituted local restrictions or bans on the use of BPA in baby bottles, formula cans, or other children’s products.

Voluntary efforts have also limited BPA production. In 2008, consumer groups voiced their concerns. Major retailers responded by refusing to stock baby bottles and other drinking containers containing BPA, and some manufacturers began to produce BPA-free alternatives. In March 2009, all six major manufacturers of baby bottles agreed to a voluntary ban on the use of BPA in bottles sold in the United States. Next, a chemical manufacturer of BPA, Sunuco, announced that it would no longer sell its plastic to makers of children’s products. However, other manufacturers such as Dow Chemical Company, Bayer, and Hexion Specialty Chemicals continue to market BPA and to use it as a liner in cans of infant formula, in baby food containers, in toddler sippy cups, and in many other infant and children’s products.

In addition to voluntary efforts at BPA reduction, there have been legislative efforts to achieve the same goal. In March 2009, a bill was introduced in the U.S. House of Representatives to ban the use of BPA in all food and beverage containers, and in July 2009, the FDA announced its intention to reconsider its BPA decision. A comprehensive national plan for control of BPA would be the most effective way to address these problems, because voluntary efforts cannot be monitored or enforced. In addition, federal legislation would be much more effective than a patchwork of local regulations throughout the nation because: (1) it would benefit consumers who would not bear the burden of identifying the source of their products and familiarizing themselves with local rules; and (2) it would benefit manufacturers, who could be certain of the law when developing products for national distribution. Finally, in light of scientific evidence indicating the potential harms of BPA, the FDA

3. U.S. Agency for Toxic Substance & Disease Registry, Glossary of Terms, <http://www.atsdr.cdc.gov/glossary.html> (last visited Jul. 19, 2009) [hereinafter ATSDR Glossary] (defining “body burden”).

would be wise to ban the use of this chemical, especially in products for infants and children.

This note first sets the stage by examining the regulatory history of BPA, as well as the scientific evidence that BPA is harmful and the plastic industry's contention that it is not. The second section examines the current movement toward citizen action through voluntary bans and toxic tort class action suits. Subsequently, the paper assesses how international and local government regulations serve to apply pressure on the federal government to develop a BPA regulatory framework. The final section examines the need for a federal-level ban on BPA in products for infants and children.

It is critical that BPA be eliminated from products intended for use by infants and young children, our most vulnerable population. In addition, alternatives should be sought for use in other food and beverage containers. While the voluntary efforts of manufacturers and retailers have led to positive results and speak well for the cooperative response from these companies, ultimately national and international regulation of BPA in consumer products remains the best way to ensure optimal public health for infants and children worldwide.

II. BACKGROUND – THE BPA CONTROVERSY

A. *Defining BPA*

Bisphenol-A, or BPA, is an endocrine disruptor, which affects hormone signaling within the body.⁴ In the past ten years, many studies have indicated that these effects are detrimental to human health and development.⁵ BPA is classified as a high-production volume (“HPV”) chemical, meaning that more than 1 million metric tons (approximately 2.2 billion pounds) of BPA are produced in the United States each year.⁶ Over 2 million metric tons are produced worldwide.⁷ BPA is ubiquitous

4. Nat'l Inst. of Envtl. Health Sci., Nat'l Institutes of Health, *Environmental Agents: Endocrine Disruptors*, <http://www.niehs.nih.gov/health/topics/agents/endocrine/index.cfm> (last visited Sept. 17, 2009).

5. NTP EXPERT PANEL REPORT, *supra* note 1, at 111-20.

6. *Id.* at 3.

7. Iain A. Lang et al., *Association of Urinary Bisphenol A Concentration With Medical Disorders and Laboratory Abnormalities in Adults*, 300 JAMA 1303, 1303 (2008), available at <http://jama.ama-assn.org/cgi/reprint/300/11/1303> [hereinafter Lang study].

in plastic consumer products and is found in baby bottles, clear polycarbonate drinking bottles, and the liners of almost all tin cans, including baby formula cans.⁸ BPA is also used as an epoxy resin on other products unrelated to food, including polycarbonate water pipes, computer parts, and children's toys.⁹

In general, endocrine disruptors are a class of chemicals, both natural and human-made, which affect hormone cycles, often at low levels of exposure.¹⁰ Evidence of harmful effects to hormone regulation following BPA exposure has been found at the cellular level, in laboratory animal studies, in wildlife studies, and in epidemiological studies of human health.¹¹ In particular, studies of cellular effects following BPA exposure have discovered the mechanism by which BPA can displace estrogen on estrogen receptors within cells.¹² In laboratory animals, primarily mice and rats, BPA has been linked to an assortment of reproductive diseases, cancers, infertility, birth defects, obesity, and heart disease.¹³ In wildlife, endocrine disruptors such as BPA are most known for disturbing gender development in fish,¹⁴ causing male fish to develop immature eggs inside their sex organs.¹⁵ BPA has also been shown to disrupt nitrogen fixation in plants.¹⁶ Finally, recent epidemiological studies have found a higher frequency of reproductive

8. NTP EXPERT PANEL REPORT, *supra* note 1, at 3.

9. *Id.* at 3, 25.

10. INT'L PROGRAMME ON CHEM. SAFETY, WORLD HEALTH ORG., GLOBAL ASSESSMENT OF THE STATE-OF-THE-SCIENCE OF ENDOCRINE DISRUPTORS, 1 (2002), available at <http://www.who.int/ipcs/publications/en/ch1.pdf> [hereinafter WHO]. See generally THEO COLBURN, DIANNE DUMANOSKI & JOHN PETERSON MYERS, OUR STOLEN FUTURE (Plume Books 1996) [hereinafter OUR STOLEN FUTURE].

11. See generally NTP EXPERT PANEL REPORT, *supra* note 1.

12. U.S. FOOD & DRUG ASS'N, DRAFT ASSESSMENT OF BISPHENOL A FOR USE IN FOOD CONTACT APPLICATIONS 3 (Aug. 14, 2008), available at http://www.fda.gov/ohrms/dockets/ac/08/briefing/2008-0038b1_01_02_FDA%20BPA%20Draft%20Assessment.pdf [hereinafter FDA DRAFT ASSESSMENT].

13. EWG REPORT, *supra* note 2 (described *infra* IIIA).

14. Yuji Takao et al., *Bisphenol A Incorporated into Eggs from Parent Fish Persists for Several Days*, 54 J. HEALTH SCI. 235, 235 (2008), available at [http://jhs.pharm.or.jp/data/54\(2\)/54_235.pdf](http://jhs.pharm.or.jp/data/54(2)/54_235.pdf).

15. Bruce J. Berger & Michael L. Junk, *Endocrine Disruptors: The Potential Cloud of Manufacturer Toxic Tort Liability*, 74 DEF. COUNS. J. 106, 107 (2007) [hereinafter Berger & Junk 2007].

16. See Jennifer E. Fox et al., *Pesticides Reduce Symbiotic Efficiency of Nitrogen-fixing Rhizobia and Host Plants*, 104 PROC. NAT. ACAD. SCI. 10282, 10283 (2007), available at <http://www.pnas.org/content/104/24/10282.full.pdf+html>. [hereinafter Fox 2007].

cancers,¹⁷ heart disease, and obesity in individuals with high BPA body burdens.¹⁸

Most people are exposed to BPA through their diets when BPA leaches from food and drink packaging into the food or drink itself.¹⁹ BPA has also been found in municipal drinking water.²⁰ In the United States, BPA has been found in over ninety percent of adults tested.²¹ Infant exposure has been traced to both formula and, at lower levels, breast milk.²² Infants and developing fetuses are believed to be at the greatest risk for adverse estrogenic effects from BPA because of their small body size and limited ability to metabolize BPA.²³

B. The Unique Harm of Endocrine Disruptors

BPA and other endocrine disruptors are unique because they do not fit within the traditional toxicology paradigm of “the dose makes the poison.”²⁴ In fact, BPA has very low acute toxicity and there are few immediate effects from consumption.²⁵ In other words, harmful effects are not associated with a single or short-term exposure.²⁶ BPA also tends not to bioaccumulate,²⁷ unlike other harmful chemical compounds, such as dichlorodiphenyltrichloroethane (“DDT”), which become increasingly

17. EWG REPORT, *supra* note 2.

18. Lang Study, *supra* note 7, at 1309.

19. NTP EXPERT PANEL REPORT, *supra* note 1, at 7-8.

20. *Id.* at 5, Table 2.

21. Antonia M. Calafat et al., *Urinary Concentrations of Bisphenol A and 4-Nonylphenol in a Human Reference Population*, 113 ENVTL. HEALTH PERSPECTIVES 391, 391 (2005) (reporting on BPA detected in urine samples from 394 randomly selected adults). See also EXEC. SUMMARY TO EWG REPORT, available at <http://www.ewg.org/reports/bisphenola> (entire report at <http://www.ewg.org/book/export/html/20928>, *supra* note 2).

22. NTP EXPERT PANEL REPORT, *supra* note 1, at 7, Table 3.

23. Frederick S. vom Saal & John Peterson Myers, *Bisphenol A and Risk of Metabolic Disorders*, 300 JAMA 1353, 1355 (2008), available at <http://jama.ama-assn.org/cgi/content/full/300/11/1353> (editorial questioning FDA's and EPA's Sept. 2008 decision not to alter recommended safe levels for BPA) [hereinafter vom Saal & Myers 2008].

24. OUR STOLEN FUTURE, *supra* note 10, at 205.

25. Bisphenol A Material Safety Data Sheet, <http://terpconnect.umd.edu/~choi/MSDS/Sigma-Aldrich/BISPHENOL%20A.pdf> (last visited Sept. 17, 2009).

26. ATSDR Glossary, *supra* note 3 (defining “acute”).

27. OFFICE OF RESEARCH AND DEV., NAT'L RISK MGMT. RES. LAB., U.S. ENVTL. PROT. AGENCY, REMOVAL OF ENDOCRINE DISRUPTOR CHEMICALS USING DRINKING WATER TREATMENT PROCESSES 8 (Mar. 2001), Doc. EPA/625/R-00/15, available at <http://www.epa.gov/nrmrl/pubs/625r00015/625r00015.pdf>.

harmful as they build up in the body over time.²⁸ Unlike traditional poisons, endocrine disruptors do not kill cells, but instead mimic hormones. This disrupts the physiological functions of natural hormones found within animals, including humans.²⁹ In this way, endocrine disruptors (acting as hormones) can have an effect at lower doses, but effects typically peak and then may increase, stabilize, or decrease at higher levels in a non-linear response curve.³⁰

This relationship between dose and effect is more complex than a linear one, and can be more difficult to discern. In a linear relationship, two variables have a directly proportional relationship; for each unit of increase in one, there will be a corresponding increase (or decrease) in the other. Thus, if one unit of BPA has some effect, then twice the dose would have an effect twice as severe. In a non-linear relationship, effects may still increase with exposure, but increases at some doses may have more of an effect than others. Reproductive and metabolic effects appear to be positively correlated with some levels of BPA exposure, although it is unclear what effects are associated with the highest levels of exposure.

Nonlinear relationships are common in the endocrine system because this system is based on feedback loops as the body responds to changing levels of endogenous hormones (hormones produced within the body).³¹ For example, when a person eats simple sugars, high levels of glucose stimulate insulin production; insulin then stimulates glucose uptake. As blood glucose is reduced, insulin production goes down. When an endocrine disruptor replaces a naturally occurring hormone, this disrupts the hormone cycle.

The hormone estrogen is important in the female reproductive cycle, and is responsible for triggering ovulation. Estrogen is also produced in smaller quantities in males. BPA disrupts the hormone cycle by binding to estrogen hormone receptors, which blocks endogenous estrogen from binding at those same locations.

Other endocrine disruptors, such as diethylstilbestrol (“DES”) use similar mechanisms.³²

DES was prescribed to pregnant women in the 1940s to prevent miscarriages and other pregnancy complications. It was considered safe and effective at the time, but within a generation, its effects were

28. See generally RACHEL CARSON, *SILENT SPRING* (Houghton Mifflin 1962).

29. WHO, *supra* note 10, at 2.

30. OUR STOLEN FUTURE, *supra* note 10, at 205.

31. *Id.* at 205-06.

32. NAT’L INST. OF ENVTL. HEALTH SCI., NAT’L INSTITUTES OF HEALTH, ENDOCRINE DISRUPTORS 3 (June 2006), available at <http://www.niehs.nih.gov/health/topics/agents/endocrine/docs/endocrine.pdf> [hereinafter NIEHS, NIH, Endocrine Disruptors].

discovered. Like BPA, DES was originally approved by the FDA, although approval for its use to prevent miscarriages was later reversed.³³ DES had intergenerational effects. DES-daughters, the daughters of women who took DES during their pregnancies, were exposed to the chemical *in utero*. This exposure caused many of these DES-daughters to develop reproductive cancers in their early twenties.³⁴ These DES-daughters filed a complaint against the producers of DES, resulting in what became a classic example of a toxic tort case, *Sindell v. Abbott Laboratories*.³⁵ The court applied market share liability to attribute causation to all of the producers according to their respective shares of DES production. In *Sindell*, a specific pill was linked to a specific harm.³⁶

Because small quantities of hormones affect physiological functions, the physiological functions of animals are affected at very low levels of exposure to these endocrine disruptors, and scientists hypothesize that humans are similarly affected.³⁷ This nonlinear disruptive effect, observed at low levels of exposure without an immediately toxic effect at much higher levels of exposure, can be counterintuitive. The required paradigm shift from established toxicological principles is one reason why endocrine disruptors have not been regulated in the United States.³⁸ Instead, agencies such as the U.S. Environmental Protection Agency ("EPA") and the FDA continue to rely on studies from the 1980s which showed no acutely toxic effects at high levels of exposure (fifty or more micrograms of BPA per kilogram of body weight per day), without considering the newer evidence of an effect at lower levels of exposure, or more recent studies, funded by the American Chemical Council ("ACC"), in which no effect was found.³⁹

According to Frederick vom Saal, a professor at the University of Missouri-Columbia who specializes in research on BPA and other

33. Certain estrogens for oral use. Notice of withdrawal of approval of new drug applications, 40 Fed. Reg. 5384 (Feb. 5, 1975).

34. *Id.*

35. *Sindell v. Abbott Laboratories*, 607 P.2d 924 (Cal. 1980).

36. *Id.*

37. WHO, *supra* note 10, at 1.

38. vom Saal & Myers 2008, *supra* note 23, at 1354.

39. *Id.* at 1354; See generally R.W. Tyl et al., *Three-Generation Reproductive Toxicity Study of Dietary Bisphenol A in CD Sprague-Dawley Rats*, 68 TOXICOL. SCI. 121-46 (2002), available at [http://toxsci.oxfordjournals.org/cgi/reprint/68/1/121?maxtoshow=&HITS=10&hits=10&RESULTFORMAT=&fulltext=Three-Generation+Reproductive+Toxicity+Study+of+Dietary+Bisphenol+A+in+CD+Sprague-Dawley+Rats&searchid=1&FIRSTINDEX=0&volume=68&issue=1&resourcetype=HW CIT \[hereinafter Tyl 2002\].](http://toxsci.oxfordjournals.org/cgi/reprint/68/1/121?maxtoshow=&HITS=10&hits=10&RESULTFORMAT=&fulltext=Three-Generation+Reproductive+Toxicity+Study+of+Dietary+Bisphenol+A+in+CD+Sprague-Dawley+Rats&searchid=1&FIRSTINDEX=0&volume=68&issue=1&resourcetype=HW CIT [hereinafter Tyl 2002].)

endocrine disruptors, the FDA and the European Food Safety Authority (“EFSA”) have chosen to ignore warnings from expert panels and instead continue to rely on the old linear response curves.⁴⁰ Vom Saal has published extensively on the harmful effects of BPA and other estrogenic endocrine disruptors, and has been one of the most outspoken critics of the FDA’s position that BPA is not harmful.⁴¹ According to vom Saal:

Despite decades of published observations by endocrinologists reporting nonmonotonic dose-response curves for hormonally active compounds, the core assumption used by the FDA, the Environmental Protection Agency, and the European Food Safety Authority in estimating ADIs [acceptable daily intake] for environmental chemicals is still based on the concept first articulated in the 16th century: “the dose makes the poison;” i.e., dose-response curves are assumed to be monotonic for environmental chemicals A fundamental problem is that the current ADI for BPA is based on experiments conducted in the early 1980s using outdated methods (only very high doses were tested) and insensitive assays. More recent findings from independent scientists were rejected by the FDA, apparently because those investigators did not follow the outdated testing guidelines for environmental chemicals, whereas studies using the outdated, insensitive assays (predominantly involving studies funded by the chemical industry) are given more weight in arriving at the conclusion that BPA is not harmful at current exposure levels.⁴²

Although relying on the best available science is the superior method for evaluating the effects of BPA,⁴³ the regulatory history of BPA shows that this practice has not been adopted. The current regulatory framework for BPA can be better understood by examining the chemical’s regulatory history.

40. vom Saal & Myers 2008, *supra* note 23, at 1354.

41. See Frederick vom Saal, *Endocrine Disruptors Group, University of Missouri-Columbia, C.V.*, <http://endocrinedisruptors.missouri.edu/vomsaal/vomsaal.html> (last visited Sept. 18, 2009).

42. vom Saal & Myers 2008, *supra* note 23, at 1354.

43. See *The Role of Science in Making Good Decisions, Testimony Before the House Committee on Science*, 105th Congress, 2d. Sess. (Jun. 10, 1998) (Testimony of Mark S. Frankel, American Association for the Advancement of Science), *transcript available at* <http://www.aaas.org/spp/sfirl/projects/testim/mftest.htm> (last visited Sept. 18, 2009).

C. Regulatory History of BPA and the Framework of Evaluation

BPA was first synthesized in 1891.⁴⁴ Although the chemical was not considered acutely toxic, some harmful effects were cited at high levels of exposure as early as the 1930s.⁴⁵ However, BPA was only used in small volumes at that time and was not carefully regulated.⁴⁶ When Congress passed the Toxic Substances Control Act (“TSCA”) in 1976,⁴⁷ BPA was grandfathered in as part of the TSCA Inventory, as were at least 62,000 other chemicals used in industry at that time.⁴⁸ In the 1980s, the EPA completed studies evaluating the toxic effects of BPA and established a BPA “safe level” Oral Reference Dose (RfD), based on a test called “No Observable Adverse Effect Level” (“NOAEL”), of 50 µg/kg/day.⁴⁹ NOAEL is defined as the “greatest concentration or amount of a substance, found by experiment or observation, which causes no detectable adverse alteration of morphology, functional capacity, growth, development, or life span of the target organism under defined conditions of exposure.”⁵⁰ This level has not been altered despite new science showing the potential harm of exposure to BPA at lower levels. In addition, although the main exposure pathway is through food, the FDA has not set a separate acceptable daily intake (“ADI”) recommendation for use of BPA in food storage.⁵¹ ADI is defined as the “amount of a food additive, expressed on a body weight basis, that can be ingested daily over a lifetime without appreciable health *risk*.”⁵² An ADI evaluation might be more effective for evaluating the effects of chronic low-level exposure and could develop a more protective standard than the EPA’s NOAEL standard because of its focus on health risk over

44. Jane Houlihan, Sonya Lunder, & Anila Jacob, *Timeline: BPA from Invention to Phase-Out*, Envtl. Working Group, Apr. 22, 2008, <http://www.ewg.org/reports/bpatimeline> [hereinafter BPA Timeline].

45. *Id.*

46. *Id.*

47. Toxic Substances Control Act, 15 U.S.C. 2601 (1976) [hereinafter TSCA].

48. BPA Timeline, *supra* note 44.

49. U.S. ENVTL. PROT. AGENCY INTEGRATED RISK INFORMATION SYSTEM, ORAL RfD ASSESSMENT: BISPHEENOL A (last revised 1993), *available at* <http://www.epa.gov/iris/subst/0356.htm> [hereinafter ORAL RfD ASSESSMENT].

50. U.S. Nat’l Library of Medicine, Nat’l Institutes of Health, Envtl. Health and Toxicology, Specialized Info. Services, IUPAC Glossary of Terms Used in Toxicology – Terms Starting with N (2009), *available at* <http://sis.nlm.nih.gov/enviro/iupacglossary/glossaryn.html> (defining NOAEL).

51. FDA DRAFT ASSESSMENT, *supra* note 12, at 5.

52. U.S. Nat’l Library of Medicine, Nat’l Institutes of Health, Envtl. Health and Toxicology Specialized Info. Services, IUPAC Glossary of Terms Used in Toxicology – Terms Starting with A (2007), *available at* <http://sis.nlm.nih.gov/enviro/iupacglossary/glossarya.html> (defining ADI).

the lifetime of a consumer. The FDA might also be a better agency than the EPA for regulating consumer products.

Although the FDA has not acted, it has been under mounting pressure to take action. In August 2008, the FDA issued its Draft Assessment, a formal decision not to regulate BPA, which excluded many well-regarded scientific studies.⁵³

Over the past two decades, many scientists have contributed to the peer-reviewed literature regarding the effects of BPA. Shortly before the FDA Draft Assessment was issued, meta-analyses were published by two expert groups: (1) government scientists with the National Toxicology Program (“NTP”);⁵⁴ and (2) a nonprofit science-advocacy group, the Environmental Working Group (“EWG”).⁵⁵ These reports contained comprehensive summaries of the research done on BPA to date. Following the FDA Draft Assessment, the FDA’s decision not to regulate BPA in light of modern scientific discoveries was also scrutinized by the FDA’s own Science Advisory Board Subcommittee, which criticized this decision to some extent.⁵⁶

The NTP, a federal program within the Department of Health and Human Services, is responsible for reviewing modern toxicological studies of public health concern.⁵⁷ The NTP is an “interagency program whose mission is to evaluate agents of public health concern by developing and applying tools of modern toxicology and molecular biology.”⁵⁸ Because it uses a science-based approach to addressing toxicological issues, the NTP is able to evaluate and present cutting-edge scientific research.⁵⁹ The NTP issued its Expert Panel Report on BPA in November 2007. This report was considered by the FDA during its decision-making process about whether to regulate BPA.

53. See FDA DRAFT ASSESSMENT, *supra* note 12; See also Anila Jacob & Sonya Lunder, *EWG Comments on the FDA’s Draft Assessment of Bisphenol A (BPA)*, Env’tl. Working Group, Sept. 12, 2008, available at http://www.ewg.org/files/BPA_091208.pdf.

54. Nat’l Toxicology Program, U.S. Dep’t of Health & Human Services, About the NTP, <http://ntp.niehs.nih.gov/go/about> (last visited Sept. 18, 2009) [hereinafter About the NTP].

55. Env’tl. Working Group, About the Environmental Working Group, <http://www.ewg.org/about> (last visited Nov. 19, 2008) [hereinafter About the EWG].

56. See FDA SCIENCE ADVISORY BOARD SUBCOMMITTEE ON BISPHENOL A, DRAFT SCIENTIFIC PEER-REVIEW OF THE DRAFT ASSESSMENT OF BISPHENOL A FOR USE IN FOOD CONTACT APPLICATIONS, Oct. 31, 2008, available at <http://www.fda.gov/ohrms/dockets/ac/08/briefing/2008-4386b1-05.pdf> [hereinafter FDA SUBCOMMITTEE REPORT].

57. About the NTP, *supra* note 54.

58. *Id.*

59. *Id.*

Conversely, the EWG is a 501(c)(3) nonprofit organization that advocates health-shifting policies.⁶⁰ Its organizational goals are more agenda-driven: “1. To protect the most vulnerable segments of the human population—children, babies, and infants in the womb—from health problems attributed to a wide array of toxic contaminants. 2. To replace federal policies, including government subsidies that damage the environment and natural resources, with policies that invest in conservation and sustainable development.”⁶¹ The EWG takes a stronger advocacy position, and supports a ban on the use of BPA in food and beverage containers, as well as in other products designed for infants and children.⁶²

In general, the NTP Expert Panel has interpreted studies more conservatively than the EWG, finding “some concern” about the risks of BPA, including neural and behavioral effects for pregnant women, fetuses, infants, and children.⁶³ Conversely, the EWG concluded that BPA poses major health risks and strongly advocates more restrictive regulation.⁶⁴ Both groups found some grounds for concern about the harmful effects of this chemical.⁶⁵

In addition to the NTP and EWG reports, following the FDA’s decision not to regulate BPA more strongly, the FDA’s Science Advisory Subcommittee issued a response to the FDA.⁶⁶ The Science Advisory Subcommittee was comprised of a group of experts that met to provide advice to the FDA in light of its recent decision not to regulate. This group conducted a careful evaluation of the FDA’s process for deciding not to regulate BPA more strongly. In particular, the Science Advisory Subcommittee evaluated both the FDA’s methods of determining which studies to rely upon, and the FDA’s choice of what information to exclude, such as excluding the variability of BPA levels within particular samples while including only an average exposure level.⁶⁷ The Subcommittee concluded, after a thorough review, that “[c]oupling together the available qualitative and quantitative information (including application of uncertainty factors) provides a sufficient scientific basis to

60. About the EWG, *supra* note 55.

61. *Id.*

62. See generally EWG REPORT, *supra* note 2; see also Envtl. Working Group, Bisphenol-A, <http://www.ewg.org/chemindex/chemicals/bisphenolA> (last visited Sept. 17, 2009)

63. NTP EXPERT PANEL REPORT, *supra* note 1, at 352-53.

64. See EWG REPORT, *supra* note 2.

65. See generally NTP EXPERT PANEL REPORT, *supra* note 1, and EWG REPORT, *supra* note 2.

66. FDA SUBCOMMITTEE REPORT, *supra* note 56.

67. *Id.* at 12.

conclude that the Margins of Safety defined by FDA as ‘adequate’ are, in fact, inadequate.”⁶⁸

In other words, the Subcommittee found gaps in the FDA’s methods for determining a margin of safety for BPA, indicating a rift in the opinions of scientists within the FDA itself. In June 2009, the FDA announced that, in light of criticism from its own scientific advisors, the decision not to regulate will be reconsidered.⁶⁹ While the conclusions made by the various reports vary in strength, some use common scientific studies as the basis for their inferences. Therefore, to understand the case for BPA regulation we must look at the plethora of scientific studies that support the hypothesis that exposure to BPA leads to physiological harm.

III. STRONG SCIENTIFIC EVIDENCE THAT BPA IS HARMFUL

A. Physiological Changes Associated with BPA Exposure

In hundreds of studies,⁷⁰ scientists have documented relationships between BPA exposure and physiological changes at every level that they have studied: (1) a cellular-level mechanism for harm has been observed; (2) reproductive, metabolic, and neurological changes have been identified in animal studies; and (3) human epidemiological studies have found correlative effects between higher levels of BPA in urine and a higher risk of heart disease and diabetes.⁷¹ In addition, other endocrine disruptors have displayed effects at very low levels of exposure.⁷² Overall, endocrine disruptors as a class affect the functioning of hormones very similarly, so it is reasonable to assume that BPA might have similar physiological effects. For example, DES also interferes with the estrogen cycle.⁷³

68. *Id.* at 4.

69. Jared A. Favole, *FDA to Revisit Decision on Safety of BPA*, WALL ST. J., June 3, 2009, available at <http://online.wsj.com/article/SB124405286248681991.html>.

70. NTP EXPERT PANEL REPORT, *supra* note 1 (for a comprehensive list, see 532 references cited at 355).

71. *Id.*

72. NIEHS, NIH, Endocrine Disruptors, *supra* note 32.

73. *Id.*

1. BPA as an Estrogen Mimic at the Cellular Level

Although the specific role of BPA as an estrogen mimic at the cellular level is still contested, a basic mechanism has been identified.⁷⁴ In the cell, BPA can bind to estrogen receptors (ER α and ER β), albeit with a lower level of affinity than endogenous (produced within the organism) estrogen.⁷⁵ When BPA binds to these estrogen receptors, endogenous estrogen cannot bind in these locations, which can potentially lead to overproduction of the hormone.⁷⁶ Isolating the specific effect of replacing endogenous estrogen with BPA is difficult to tease out because BPA is not the only nonendogenous compound that can bind to estrogen receptors, blocking the attachment of the human-produced hormone. For example, some plant-based estrogens, which are naturally found in human diets, such as those found in soy, also bind to these receptors.⁷⁷ Identifying the estrogen receptors that are affected, and the mechanism by which BPA displaces hormone signals, is an important step in describing the pathway and resultant effect of BPA.⁷⁸

2. BPA has Been Correlated with Reproductive, Metabolic, and Neurological Effects in Laboratory Animal Studies

The reported effects of BPA on laboratory animals are wide-ranging, but studies show that the chemical most noticeably affects the reproductive system. For example, the EWG Report summarizes animal studies, primarily conducted on mice, documenting effects in order of increasing exposure to BPA including: permanent changes to genital tracts, changes in breast tissue, increasing prostate weight, increase of anogenital distance in both genders (distance from anus to genitals; a smaller anogenital distance is a signal of male feminization), signs of early puberty and longer estrus, decline in testosterone, breast cells predisposed to cancer, prostate cells more sensitive to cancer, decreased maternal behavior, and, at 30 $\mu\text{g}/\text{kg}/\text{day}$, reversal of normal sex differences in brain structure and behavior.⁷⁹ While there may not be a linear relationship between increased levels of BPA exposure and worse health effects, reproductive effects are seen at less than the NOAEL safe level of 50 $\mu\text{g}/\text{kg}/\text{day}$. While some may argue that changes such as

74. FDA DRAFT ASSESSMENT, *supra* note 12, at 3-4.

75. *Id.* at 3.

76. NIEHS, NIH, Endocrine Disruptors, *supra* note 32.

77. *Id.*

78. See Ana M. Soto et al., *The E-SCREEN Assay as a Tool to Identify Estrogens: An Update on Estrogenic Environmental Pollutants*, 103 ENVTL. HEALTH PERSP., Supp. 7, 113-22 (1995), available at <http://www.pubmedcentral.nih.gov/picrender.fcgi?artid=1518887&blobtype=pdf>.

79. EWG REPORT, *supra* note 2.

earlier onset of puberty in mice do not inherently demonstrate a similar effect on human health, they certainly signal that BPA is changing mammalian reproductive systems. A cautious approach would limit these changes by removing BPA from our diet until we know whether humans are similarly affected, and what this means for the functioning of the human reproductive system.

While many of the identified health effects focus on estrogenic activity, other possible hazards include liver damage, disrupted pancreatic β -cell function, thyroid hormone disruption, and obesity-promoting effects.⁸⁰ Finally, some primate studies show correlations between BPA exposure and neurodevelopmental effects.⁸¹ For example, one study found that BPA exposure affected memory, learning, and mood of primate subjects.⁸²

3. Epidemiological Studies Show a Positive Correlation between BPA Exposure and Reproductive and Metabolic Effects in Humans

Because it is unethical to experiment on human subjects, causation is always difficult to document in observational studies.⁸³ Therefore, scientists rely heavily on epidemiological studies to learn about population-wide effects of chemical exposure.⁸⁴ Some developmental effects following BPA exposure have been observed in human babies and fetuses.⁸⁵ Health Canada, the Canadian department responsible for national public health, has also recognized that some reproductive effects may be associated with BPA exposure in humans.⁸⁶

80. Lang study, *supra* note 7, at 1303.

81. C. Leranth et al., *Bisphenol A Prevents the Synaptogenic Response to Estradiol in Hippocampus and Prefrontal Cortex of Ovariectomized Nonhuman Primates*, 105 PROC. NAT'L ACAD. SCI. 13705-06 (2008), available at <http://www.ncbi.nlm.nih.gov/pubmed/18768812>; see also Lyndsey Layton, *Chemical in Plastic is Connected to Health Problems of Monkeys*, WASH. POST, Sept. 4, 2008, at A2, available at <http://www.washingtonpost.com/wp-dyn/content/article/2008/09/03/AR20080903033397.html>.

82. *Id.*

83. See generally Lynn R. Goldman & Jonathan M. Links, *Testing Toxic Compounds in Human Subjects: Ethical Standards and Good Science*, 112 ENVTL. HEALTH PERSP. A458 (June 2004).

84. *Id.*

85. Nat'l Toxicology Program, Nat'l Inst. of Env'tl. Health Sci., Nat'l Institutes of Health, *Since You Asked - Bisphenol A*, <http://www.niehs.nih.gov/news/media/questions/sya-bpa.cfm> (Last visited Aug. 1, 2009).

86. ENV'T CANADA AND HEALTH CANADA, SCREENING ASSESSMENT FOR THE CHALLENGE PHENOL, 4,4 -(1-METHYLETHYLIDENE) BIS- (BISPHENOL A) CHEMICAL ABSTRACTS SERVICE REGISTRY NUMBER 80-05-7 (2008), ii, available at http://www.ec.gc.ca/substances/ese/eng/challenge/batch2/batch2_80-05-7_en.pdf.

One important study that has received a very high level of scrutiny was conducted by Lang and others, and was published in the Journal of the American Medical Association on September 17, 2008⁸⁷, the same day that the FDA issued its draft decision not to regulate BPA in food containers. The Lang study was a large-scale epidemiological study that evaluated BPA's effects on over 1,500 adults using a database provided by the Center for Disease Control. The Lang study found that adults with higher levels of BPA in their urine had higher rates of heart disease and diabetes, as well as greater impairment of the liver (as determined by higher levels of certain enzymes produced by the liver).⁸⁸ Specifically, the study found that the twenty-five percent of people with the highest levels of BPA in their bodies were more than twice as likely to have heart disease and/or diabetes compared to the twenty-five percent of people with the lowest levels of BPA.⁸⁹

4. BPA Exposure Occurs from Food and Drink Consumption

Although industry has contested a causal link between imbibing or ingesting from BPA-lined containers and an increase in BPA concentrations in humans, this link has been recently confirmed. A May 2009 Harvard study found that drinking from polycarbonate bottles increased the urinary concentration of BPA following one week of polycarbonate bottle use.⁹⁰

B. Counterpoint: The Plastics Industry Argues that BPA is a Useful Product That Does Not Cause Harm

In contrast to mounting concern that BPA may cause harm, plastics-industry scientists and others have maintained that BPA is not harmful and provides many benefits. In particular, they point out that BPA does not possess many of the characteristics of concern for other regulated chemicals: BPA is not acutely toxic and does not bioaccumulate as much as some other chemicals.⁹¹ In addition, the plastics industry has introduced studies of its own, mostly in trade papers that are not peer-reviewed, claiming it found that BPA had no effects when it replicated or

87. Lang Study, *supra* note 7.

88. *Id.* at 1309.

89. *Id.* at 1306.

90. Jenny L. Carwile et al., *Polycarbonate Bottle Use and Urinary Bisphenol A Concentrations*, 117 ENVTL. HEALTH PERSP. 1368, 1368 (Sept. 2009), available at <http://www.ehponline.org/members/2009/0900604/0900604.pdf>.

91. Polycarbonate/BPA Global Group, American Chemistry Council, *Bisphenol A Fact Sheet* (July 2007) available at <http://www.bisphenol-a.org/pdf/FactSheet-environmental.pdf>.

repeated studies in which others had found that BPA did have effects.⁹² In addition, other industry criticisms are legitimate but typical of those leveled at any scientific work indicating a potential threat to human health. These arguments follow strategies recommended for use by manufacturers concerned about defending toxic tort liability suits: (1) attacking causation by a certain product, since it can be hard to show that harm resulted from that particular product; (2) attacking causation from a scientific perspective, since epidemiological studies are inherently observational so they can only be correlative; (3) attacking experts by showing expert opinions are unfounded and inadmissible; and (4) attacking the limitations of animal studies, because effects seen in animals do not necessarily correspond to the same harm in humans.⁹³ These are the responses that the ACC has made. For example, in its response to the Lang study (finding a positive correlation between higher levels of BPA in human urine with higher levels of heart disease and obesity), the ACC states several criticisms common to all epidemiological studies, concluding: “[o]verall, due to inherent limitations in study design, this new study cannot support a conclusion that Bisphenol A causes any disease.”⁹⁴ “Inherent limitations on study design” refers to the inherent limitations of all epidemiological studies, because these types of studies are always observational rather than truly experimental.⁹⁵

These industry claims have created discord between the industrial and scientific communities. In a comprehensive review of BPA-related scientific literature, Frederick vom Saal and Claude Hughes discovered a stark pattern of disagreement between BPA studies published by industry and those published by other scientists.⁹⁶ Vom Saal found that one hundred percent of industry studies show no harm, while any study that did show harm was conducted by government-funded or academic

92. See generally S.Z. Cagen et al., *Normal Reproductive Organ Development in CF-1 Mice Following Prenatal Exposure to Bisphenol A*, 50 TOXICOLOGICAL SCIENCES 36, 36-44 (1999), available at <http://bisphenol-a.org/pdf/ToxicologyCagen3.pdf>; see also Ty1 2002, *supra* note 39.

93. Berger & Junk 2007, *supra* note 15, at 115.

94. Press Release, American Chemistry Council’s Polycarbonate/ BPA Global Group, *New Bisphenol A Study has Limited Capability to Assess Human Health Effects, A Statement from the American Chemistry Council* (Sept. 16, 2008), available at http://www.americanchemistry.com/s_acc/sec_news_article.asp?SID=1&DID=7968&CID=206&VID=142&RTID=0&CIDQS=&Taxonomy=&specialSearch=.

95. *Id.*

96. Frederick vom Saal & Claude Hughes, *An Extensive New Literature Concerning Low-dose Effects of Bisphenol A Shows the Need for New Risk Assessment*, 113 ENVTL. HEALTH PERSP. 926, 929 (2005), available at <http://www.ehponline.org/members/2005/7713/7713.pdf> [hereinafter vom Saal & Hughes 2005].

scientists.⁹⁷ He reiterated this point in 2007;⁹⁸ interestingly, while not all academic studies showed an effect, there were no industry studies that showed any effect.⁹⁹ Academics claim their studies are superior because they have been published in peer-reviewed journals, where the research has been reviewed by others.¹⁰⁰ Industry has countered by critiquing academic and government scientists' methods, and by identifying flaws inherent to certain toxicological studies. In particular, industry suggests that effects observed in animals cannot be extrapolated to humans and cites particular flaws with the population of mice selected for experimentation.¹⁰¹

Finally, industry and its supporters argue that even if BPA does have some harmful health effects, they are outweighed by its benefits. Use of polycarbonate and epoxy products containing BPA as a by-product is pervasive in safety products such as children's bicycle helmets, as well as for tin cans liners, which prevents botulism.¹⁰² Thus, banning BPA or limiting its use might have unexpected consequences. Although some BPA alternatives are available for some products, industry supporters argue that it is unclear whether BPA alternatives are available for all products. In addition, if they are, they might have even worse, unknown effects.¹⁰³

C. Science as a Guide for Informing Policy Decisions

Regulatory agencies in the United States and the EU continue to side with industry. In particular, the EPA and the EU Food Safety Authority have issued recent statements declining to pursue more stringent regulation of BPA.¹⁰⁴ However, as others publicize new

97. *Id.*

98. Frederick vom Saal & Claude Hughes, *Bisphenol A: vom Saal and Hughes Respond*, 114 ENVTL. HEALTH PERSP. A16, A17 (Jan. 2006).

99. vom Saal & Hughes 2005, *supra* note 97, at 926.

100. *See* vom Saal & Myers 2008, *supra* note 23, at 1354.

101. Berger & Junk 2007, *supra* note 15, at 114.

102. Britt E. Erickson, *Bisphenol A Under Scrutiny*, 86 CHEM. & ENG'G NEWS 36, at paras. 3, 24, June 2, 2008, available at <http://pubs.acs.org/cen/government/86/8622gov1.html>.

103. *Id.*

104. Trevor Butterworth, *European Safety Review: No Risk from Bisphenol A Exposure*, STATISTICAL ASSESSMENT SERVICE/ STATS, Feb. 1, 2007, available at http://stats.org/stories/2007/euro_safety_bpa_feb01_07.htm; U.S. Food & Drug Admin., U.S. Dep't of Human Services, *Bisphenol A*, available at <http://www.fda.gov/NewsEvents/PublicHealthFocus/ucm064437.htm> (Statement re: FDA Decisions of April 2008) [hereinafter FDA Decision of April 2008].

scientific findings regarding BPA's detrimental health effects, recent announcements indicate that a shift in policy may be forthcoming.

Despite the paucity of regulation for BPA-containing plastics in packaging or consumer products, efforts to limit BPA in food packaging continue. Consumer groups, convinced that BPA is affecting public health, have been actively convincing retailers and manufacturers to stop selling BPA-laced children's products.¹⁰⁵ In fact, all six of the major producers of baby bottles have agreed to eliminate BPA from their products in the United States.¹⁰⁶ Internationally, Japan and the United Kingdom have also worked with industry to limit BPA in plastic packaging.¹⁰⁷ While these bottom-up actions are contributing to voluntary changes, legislation has also been proposed internationally and locally. In October 2008, Canada banned the import and sale of polycarbonate baby bottles containing BPA.¹⁰⁸ In the United States, Minnesota and Connecticut have passed bills banning BPA from baby bottles and infant formula cans, respectively. Other states and localities have proposed independent legislative bills. For example, Chicago, Illinois and Suffolk County, New York have banned BPA in some products.¹⁰⁹ Because the issues and concerns about the effects of BPA are universal, conversations continue at local, state, national, and international levels. These conversations show a wide range of approaches toward regulation in an area of uncertainty. Despite federal inaction within the United States, actions by consumer groups, individual states, and the international community are building to a perfect storm that should spur federal action on this crucial issue.

105. Marc Gunther, *Wal-Mart: The New FDA*, FORTUNE, July 16, 2008, available at http://money.cnn.com/2008/07/15/magazines/fortune/gunther_bpa.fortune/index.htm [hereinafter Gunther 2008].

106. Lyndsey Layton, *No BPA for Baby Bottles in U.S.*, WASH. POST, Mar. 6, 2009, available at http://www.washingtonpost.com/wp-dyn/content/article/2009/03/05/AR2009030503285_pf.html [hereinafter Baby Bottle Ban].

107. Akiko Matsumoto et al., *Bisphenol A Levels in Human Urine*, 111 ENVTL. HEALTH PERSP. 101, 103 [hereinafter Matsumoto 2003], available at <http://www.jstor.org/pss/3455727>. <http://www.food.gov.uk/multimedia/pdfs/bisacanresponse.pdf>.

108. *Health Canada finds Bisphenol A in soft drinks*, CBC News, Mar. 6, 2009, available at <http://www.cbc.ca/health/story/2009/03/05/popcans.html>.

109. Susanne Rust, *Connecticut Bans Bisphenol-A*, MILWAUKEE J. SENTINEL ONLINE June 4, 2009, available at <http://www.jsonline.com/news/milwaukee/46998537.html> [hereinafter Rust 2009].

IV. INDIVIDUAL ACTIONS LEAD TO VOLUNTARY BANS OF BPA BY PLASTICS INDUSTRY

A. Voluntary Bans on BPA-Containing Consumer Products by Retailers

In the absence of government regulation, one surprising development has been the active role of commercial retailers limiting sales of products containing BPA. In the wake of studies showing the harmful effects of BPA exposure and in response to individual complaints from customers, retailers have voluntarily removed some infant products, such as baby bottles, containing BPA from their shelves.¹¹⁰ The movement to petition retailers was very effective.¹¹¹ While it would be hard for an individual person to stop purchasing products with BPA due to lack of labeling information and lack of alternatives, retailers are better able to investigate these options on a larger scale. In addition, retailers can use their positions as mass purchasers to investigate manufactured products and to work with suppliers.

In 2008, even before the Lang study was released, Wal-Mart, Toys “R” Us, CVS, and other retailers instituted bans, while others have offered BPA-free alternatives for baby bottles and adult consumer drinking bottles.¹¹² Whole Foods Market eliminated BPA from its bottles and cups years ago, in light of early concerns about endocrine disruptors.¹¹³ Manufacturers such as Nalgene and Playtex also announced they would phase out polycarbonate bottles containing BPA by-products.¹¹⁴ These changes demonstrate the ability of free markets to alter consumer products in response to public concern, even in the absence of defined regulations. Critics respond that these businesses are too protective, but proponents praise the rapid response.¹¹⁵ For drinking containers in particular, BPA-free alternative products were available in retail facilities even in the absence of mandatory regulation.¹¹⁶

110. Gunther 2008, *supra* note 106.

111. *Id.*

112. *Id.*

113. *Id.*

114. Tresa Baldas, *Plastic Bottle Suits Bubble Up*, NAT'L L.J., June 2, 2008, available at <http://www.law.com/jsp/article.jsp?id=1202421860232> [hereinafter Baldas 2008].

115. Gunther 2008, *supra* note 106.

116. *Id.*

In March 2009, a revolution began amongst industrial plastics producers in the United States. On March 3, 2009, the six major U.S. baby bottle manufacturers all announced they would ban production of plastic bottles containing BPA for sale in the United States, though they would continue to sell the bottles in other countries.¹¹⁷ Then, on March 12, 2009, Sunoco, a manufacturer that sells BPA to other manufacturers, announced that it would not sell its BPA plastics to anyone who creates products for children or infants.¹¹⁸ This announcement signaled a truly remarkable industrial transformation. While Sunoco is not the primary producer of BPA, its BPA policy may pressure other major plastics manufacturers, including Dow Chemical Company, Bayer, and Hexion Specialty Chemicals, to develop similar policies.¹¹⁹

The international community quickly responded to these voluntary bans; for example the National Childbirth Trust urged similar actions in the United Kingdom¹²⁰ by requesting the country to reconsider additional BPA restrictions for children's products.

The decisions of major retailers to stop selling these products played a large role in the bottle makers' business decisions to remove BPA from their products.¹²¹ This is clearly reflected by statements made by Shannon Jenest, a representative of Phillips Avent, who spoke to this change in demand: "[w]e felt like we had hit a tipping point with our consumers and with our retailers . . . Babies "R" Us was banning it, Target was going to, CVS was going to, and so the distribution channels were lessening and lessening."¹²²

While this sudden goodwill on the part of manufacturers speaks to the power of individual consumers and their influence on retailers, in turn leading up the chain to manufacturers, there may be other reasons for this sudden voluntary ban. Manufacturers may be responding to market demands for BPA-free products. Another motivator may be concerns that manufacturers will be held responsible for harms to public health through toxic tort class action lawsuits.

117. Baby Bottle Ban, *supra* note 107.

118. Matthew Perrone, *Sunoco Restricts Sales of Chemical Used in Bottles*, ASSOCIATED PRESS, Mar. 12, 2009, available at http://www.iccr.org/news/press_releases/pdf%20files/052909sunoco.pdf.

119. *Id.*

120. *Plastic Baby Bottle Plea*, EDINBURGH EVENING NEWS, Mar. 14, 2009, available at <http://news.scotsman.com/health/Plastic-baby-bottle-plea.5072711.jp>.

121. Baby Bottle Ban, *supra* note 107.

122. *Id.*

*B. Toxic Tort—Class Action Lawsuits against Baby Bottle and
Formula Manufacturers*

Concerns for potential litigation exposure also may be influencing manufacturers' decisions not to make BPA-laced baby bottles and other products for infants. Several toxic tort class action lawsuits have been filed in response to public concern over BPA.¹²³

In particular, one California law firm¹²⁴ has filed several lawsuits in the U.S. District Court in Los Angeles against baby formula manufacturers Mead Johnson & Company, which produces Enfamil liquid formula, and Abbott Laboratories, the producer of Similac infant formula.¹²⁵ Lawsuits have also been filed against baby bottle manufacturers Avent America, Inc., Handi-Craft (Dr. Brown's baby bottles), Gerber Products Company, and Evenflo Company, Inc.¹²⁶ All of these lawsuits allege that the named company knew, or should have known, that its BPA-containing products were dangerous and could potentially cause injury to infants and children, yet the company continued to produce, market, and distribute baby formula and bottles containing BPA with reckless disregard to the risks. The plaintiffs, who are all parents, claim that the companies have "engaged in unfair, unlawful and fraudulent business practices by carrying out false and deceptive advertising and selling of BPA-containing products which they knew or should have known to be unsafe."¹²⁷ In all cases, the parents claim that they were unaware that common cooking and cleaning actions were enough to release BPA into liquid consumed by their babies.¹²⁸ These actions include simply washing bottles in hot water or a

123. Baldas 2008, *supra* note 115.

124. See Press Release, Baum, Hedlund, Aristei & Goldman, P.C., Baby Formula Class Actions Filed Against Makers of BPA - Laced Products (July 30, 2009), http://www.baumhedlundlaw.com/bpa/bpa_press_070308.php [hereinafter Baum Hedlund].

125. BPA leaches into liquid formula more than in powdered forms. Liquid baby formula cases filed are: Beckner v. Mead Johnson, No. 2:08-cv-03765 (filed June 9, 2008) (for use of BPA-laced Enfamil liquid formula used by her twins); Anderson v. Abbott Laboratories, No. 2:08-cv-03860 (filed June 12, 2008) (for use of BPA-laced Similac liquid formula used by her child) *cited in* Baum Hedlund, *supra* note 125.

126. See Baby bottle cases (filed May 6, 2008): Lanza v. Avent Am., Inc., No. 2:08-cv-02960 (for use of BPA-laced Avent baby bottles used by her children); Rasmussen v. Handi-Craft Co., No. 2:08-cv-02961 (for use of BPA-laced Dr. Brown's baby bottles used by his twins); Matusek v. Gerber Products Co., No. 2:08-cv-02962 (for use of BPA-laced Gerber baby bottles used by her twins); O'Neill v. Evenflo Co., Inc., No. 2:08-cv-02963 (for use of BPA-laced Evenflo baby bottles used by her child) *cited in* Baum Hedlund, *supra* note 125.

127. *Id.*

128. Baum Hedlund, *supra* note 125.

dishwasher, boiling bottles to sanitize them, or heating the bottles in a microwave.¹²⁹ Other class action suits have been filed in Missouri, Kansas, and Connecticut, contending that baby bottle and sippy cup manufacturers failed to disclose information about BPA's effects on infants.¹³⁰

In addition, Nalgene has been sued for the sale of their polycarbonate bottles; the plaintiffs in this suit also claim Nalgene knew or should have known that BPA in its bottles was harmful to consumers.¹³¹ Not long after the plaintiffs in this case requested injunctive relief, Nalgene decided to stop manufacturing bottles that contain BPA.

Although all of these suits are pending, manufacturers clearly understand that producing BPA-filled products subjects them to the risk of toxic tort lawsuits. This may pressure manufacturers to develop safer alternatives.

V. INTERNATIONAL ACTION AND BPA REGULATION

While the U.S. government has been relatively inactive in the area of BPA regulation, there is growing concern in the international community over the effects of endocrine disruptors, particularly BPA. Pressure from the states at one level and the international community at another may serve as "twin levers" to pressure the FDA into reconsidering its decision not to regulate BPA.¹³² Canada was the first to announce its decision to ban BPA in baby bottles and is currently eliminating their sale within Canada.¹³³ In addition, Japan has developed

129. *Id.*

130. *Sullivan v. Avent*, No. 4:08-cv-00309 (W.D. Mo.); *Wilson v. Avent*, No. 2:08-cv-02201 (D. Kan.); and *Gangei v. Ralphs*, No. BC 367732 (Los Angeles Co., Calif., Super. Ct.); Baldas 2008, *supra* note 115; *See also Lawsuit filed against Playtex for Bisphenol A*, CBC NEWS, May 29, 2008, available at <http://www.cbc.ca/consumer/story/2008/05/29/bpa-playtex.html> (regarding Campbell v. Playtex Products, filed in New Haven, Conn).

131. Gina Keating, *Nalgene Sports Bottle Maker Sued Over Toxic Claims*, Reuters, <http://www.reuters.com/article/newsOne/idUSN2335756720080424> (last visited Sept. 18, 2009).

132. *See* Daryl W. Ditz, *The States and the World: Twin Levers for Reform of U.S. Federal Law on Toxic Chemicals*, 8 SUSTAINABLE DEV. L. & POL'Y 27 (2007) [hereinafter Ditz 2007].

133. Lyndsey Layton & Christopher Lee, *Canada Bans BPA from Baby Bottles*, WASH. POST, Apr. 19, 2008, at A3, available at <http://www.washingtonpost.com/wp-dyn/content/story/2008/04/18/ST2008041803545.html> [hereinafter Canada Bans BPA].

effective voluntary agreements with industry to create alternate consumer products.¹³⁴

A. Canada Leads by Becoming the First Nation to Announce a Ban on BPA in Baby Bottles

Canada was the first nation to propose a ban on BPA in consumer products.¹³⁵ On April 18, 2008, the Canadian Ministers of Health (Tony Clement) and of the Environment (John Baird) issued a statement stating that Canada was considering a ban on the importation, sale, and advertising of polycarbonate baby bottles that contain BPA.¹³⁶ Health Canada based its decision on its own preliminary studies, which focused on the exposure of infants less than eighteen months old to BPA.¹³⁷ These studies concluded that while BPA exposure was below levels known to produce a risk, the margin of safety was inadequate.¹³⁸ In addition, Environment Canada noted negative effects on aquatic systems, notably the impacts on fish populations.¹³⁹

Thereafter, in October 2008, Canada proposed to officially list BPA as a toxic substance.¹⁴⁰ This entails defining BPA as a “substance that may be entering the environment in a quantity or concentration or under conditions that constitute or may constitute a danger in Canada to human life or health.”¹⁴¹ These findings were consistent with other recent research; the difference was in the response to the findings. While most acknowledge that some unquantified risk exists, Canada employed a more precautionary approach in the face of uncertainty, placing the burden of proof on industry to show that BPA was safe rather than on consumers to show harm.¹⁴² Canada’s decision to limit BPA in consumer

134. Matsumoto 2003, *supra* note 108, at 103; *see also* EWG REPORT, *supra* note 2, at 6 (companies reduced BPA Exposures in Japan).

135. Canada Bans BPA, *supra* note 133.

136. Government of Canada, Government of Canada Protects Families With Bisphenol A Regulations (Oct. 17, 2008), http://www.chemicalsubstanceschimiques.gc.ca/challenge-defi/bisphenol-a_e.html (last visited Sept. 18, 2009).

137. News Release, Government of Canada, *Government of Canada Takes Action on Another Chemical of Concern: Bisphenol A* (Apr. 18, 2008), available at http://www.hc-sc.gc.ca/ahc-asc/media/nr-cp/_2008/2008_59-eng.php.

138. *Id.*

139. *Id.*

140. *Toxic Status Possible for Bisphenol A*, CBC News, Oct. 17, 2008, <http://www.cbc.ca/health/story/2008/10/17/bpa-toxic.html>.

141. *Id.*

142. *See generally* Environment Canada, A Canadian Perspective on the Precautionary Approach/Principle, http://www.ec.gc.ca/econom/pamphlet_e.htm (last

products has received much attention from the rest of the international community.

B. Voluntary BPA Reductions in Japan

In addition to Canada's top-down regulation strategy, other nations have been working with industry toward voluntary BPA reductions in consumer products. Japan has taken a pioneering role by using this approach.¹⁴³ In response to concerns about BPA in canned food and beverages, most major manufacturing companies began to eliminate or reduce the use of BPA in Japan as early as 1997.¹⁴⁴ The Japanese also voluntarily replaced polycarbonate plates and utensils with safer alternatives such as melamine and stainless steel.¹⁴⁵ Japanese risk assessors estimate that these can and tableware changes reduced BPA intake of the Japanese, bringing exposure levels down to 0.3 to 0.5 $\mu\text{g}/\text{kg}/\text{day}$.¹⁴⁶ In a follow-up study, Matsumoto, a Japanese scientist, found a decline in urinary BPA levels of Japanese subjects in 1999 compared with those in 1992, before the voluntary reduction began.¹⁴⁷ Japan's model has great promise. Other nations have taken note and considered following Japan's lead. For example, in 2001, the United Kingdom Food and Safety Administration considered a similar model, but it is unclear whether any such policy has been implemented.¹⁴⁸ In the United States, the EWG has recommended that U.S. manufacturers make similar voluntary steps to identify alternatives.¹⁴⁹

visited July 21, 2009).

143. See Matsumoto 2003, *supra* note 108; see also EWG REPORT, *supra* note 2.

144. Matsumoto 2003, *supra* note 108, at 103; see also EWG REPORT, *supra* note 2, at 6 (Companies reduced BPA Exposures in Japan).

145. RESEARCH CENTER FOR CHEMICAL RISK MANAGEMENT (RCCRM), BISPENOL A RISK ASSESSMENT DOCUMENT, AIST RISK ASSESSMENT DOCUMENT COMPREHENSIVE CHEMICAL SUBSTANCE ASSESSMENT AND MANAGEMENT PROGRAM (JAPAN 2005) in EWG REPORT, *supra* note 2.

146. Env'tl. Working Group, *Bisphenol A: Toxic Plastics Chemical in Canned Food: Companies reduced BPA exposures in Japan*, May 23, 2007, available at <http://www.ewg.org/node/20938>.

147. Matsumoto 2005, *supra* note 108, at 103.

148. UNITED KINGDOM FOOD SAFETY AUTHORITY ("UKFSA"), MIGRATION OF BISPENOL A FROM CAN COATINGS INTO FOOD: RESPONSES TO CONSULTATION (2001), available at <http://www.food.gov.uk/multimedia/pdfs/bias.canresponse.pdf>.

149. EWG REPORT, *supra* note 2.

C. The EU Adopts Wait-and-See Approach to BPA in Consumer Products

While some governments have moved toward more restrictions on BPA, others have adopted the U.S. policy not to further regulate BPA. The EU has issued statements that BPA does not cause a risk to human health and will not be banned.¹⁵⁰ In 2007, the EFSA concluded that the 50 µg/kg/day level was still valid.¹⁵¹ In addition, it found no risk during its evaluation of exposure from the lining of cans, but did not include data on the potential migration of BPA from containers into food during microwave heating or other heating actions.¹⁵² However, in May 2008 the EFSA announced that in light of concern by scientists in Canada and the United States, they would reconsider this decision.¹⁵³ While there have been no recent statements by the EFSA, it would appear that any new policy developments within the United States would be examined carefully and that the EU is open to revisiting this issue.

VI. ACTUAL AND PROPOSED LEGISLATION BANNING BPA IN U.S. STATES AND LOCAL COMMUNITIES

In response to the inaction at the federal level and mounting concern by citizens, several U.S. states have passed or introduced legislation banning BPA in infant products, food and beverage containers, and other similar products.¹⁵⁴ There is particular concern about the exposure risks for infants, a very developmentally vulnerable population.

150. European Union Food Safety Auth., *Opinion of the Scientific Panel on Food Additives, Flavourings, Processing Aids and Materials in Contact with Food on a Request From the Commission Related to 2, 2-Bis (4-Hydroxyphenyl) Propane*, 428 E.F.S.A. J. 1, 5 (Nov. 29, 2006), available at http://www.efsa.europa.eu/cs/BlobServer/Scientific_Opinion/afc_op_ej428_bpa_op_en,3.pdf?ssbinary=true [hereinafter EFSA 2006].

151. *Id.*

152. *Id.*

153. Linda Rano, *EFSA to Review BPA Advice on the Back of US, Canadian Concerns*, FOODPRODUCTIONDAILY.COM, May 2, 2008, <http://www.foodproductiondaily.com/Packaging/EFSA-to-review-BPA-advice-on-the-back-of-US-Canadian-concerns>.

154. Mary Ann Romans, *Three States Request Volunteer Ban of BPA in Baby Products*, FAMILIES.COM, available at <http://baby.families.com/blog/three-states-request-volunteer-ban-of-bpa-in-baby-products> [hereinafter Romans]; Susanne Rust & Meg Kissinger, *Lawmakers to Seek Ban on BPA*, J. SENTINEL, Nov. 17, 2008, available at <http://www.jsonline.com/watchdog/watchdogreports/34623239.html> [hereinafter Rust & Kissinger 2008].

In May 2009, Minnesota became the first state to ban the sale of children's drinking products made with BPA.¹⁵⁵ Connecticut followed shortly thereafter with a ban on BPA in cans of infant formula.¹⁵⁶ Local governments in Suffolk County, New York and Chicago, Illinois have also restricted products with BPA.¹⁵⁷ Legislation has been proposed in at least eight other states (New York, Massachusetts, Wisconsin, New Jersey, Delaware, Hawaii, Washington, and Oregon).¹⁵⁸ These legislative signals show a perceived need to regulate, but also reflect a reluctance to regulate in an area that is normally regulated at the federal level. State efforts have arisen in response to a perceived vacuum of federal regulation.

Accumulating scientific evidence and international developments, including regulatory actions and shifts in global markets, are increasing the pressure on the federal government to act.¹⁵⁹ In addition, states may pressure the federal government to regulate BPA.

VII. THE NEED FOR NATIONAL REGULATION OF BPA

A. *Who Should Regulate?*

Despite the mounting evidence that potential harms may result from BPA exposure, the current U.S. policy is that there is no need to further limit production of BPA in consumer products. The policymakers note that the current recommended "safe level" of exposure set by the EPA for BPA is higher than most people would be exposed to while consuming a regular diet.¹⁶⁰ In addition, neither the United States nor the EU place additional limits on the use of BPA-containing plastics in consumer products or food packaging.¹⁶¹

In response to this regulatory vacuum, a patchwork of state, county, and voluntary bans may have some effect. However, a variation in standards often leads to confusion and hinders enforcement. A

155. Lorna Benson, *Governor Signs BPA Ban, Chemical Oversight Bill*, Minnesota Pub. Radio NEWS Q, May 8, 2009, available at http://minnesota.publicradio.org/display/web/2009/05/08/minnesota_bpa_ban/.

156. Rust 2009, *supra* note 110.

157. *Id.*

158. Romans, *supra* note 154; Rust & Kissinger, *supra* note 154; Emily Sohn, *Infant Fears*, MINNESOTA MONTHLY, Nov. 2008, available at <http://www.minnesotamonthly.com/media/Minnesota-Monthly/November-2008/Infant-Fears/>.

159. *See generally* Ditz 2007, *supra* note 132.

160. ORAL RFD ASSESSMENT, *supra* note 49.

161. *See generally* EFSA 2006, *supra* note 150.

standardized national policy would be more effective at protecting all citizens.

In the United States, most of the recent evaluation of BPA as a harmful substance has occurred within the FDA, since the main exposure pathway is through diet.¹⁶² In September 2008, the FDA acknowledged that some BPA does leach into food through food packaging, baby bottles, and polycarbonate drinking bottles, but declined to place new limits on BPA use and production.¹⁶³ However, the FDA has announced that it will continue to review new research, indicating it may be open to future shifts in policy. The FDA states:

[b]ased on our ongoing review, we believe there is a large body of evidence that indicates that FDA-regulated products containing BPA currently on the market are safe and that exposure levels to BPA from food contact materials, including for infants and children, are below those that may cause health effects. However, we will continue to consider new research and information as they become available.¹⁶⁴

Scientists, including Dr. Lang, the lead author of the Lang study,¹⁶⁵ and the Union of Concerned Scientists, the leading science-based nonprofit addressing issues of environmental and public health,¹⁶⁶ have criticized this decision.¹⁶⁷ They contend that the FDA has failed to understand the unique nature of endocrine disruptors, which have detrimental effects at very low levels of exposure.¹⁶⁸ Instead, the FDA continues to rely on flawed, outdated studies from the 1980s, while continuing to exclude hundreds of more recent studies.¹⁶⁹ Lang and others claim that new techniques, used in most of the studies since the 1990s, are much more effective at evaluating the effects of low-level exposure to BPA.¹⁷⁰ They question the FDA's motivation in discounting the more accurate research in favor of the older studies and those sponsored by the chemical industry.¹⁷¹ To date, the FDA has not altered

162. Statement re: FDA Decision of April 2008, *supra* note 105.

163. *Id.*

164. *Id.*

165. *See supra* Section III.

166. Union of Concerned Scientists, About Us, <http://www.ucsusa.org/about/> (last visited Aug. 11, 2009).

167. Lyndsey Layton, *Study Links Chemical BPA to Health Problems*, WASH. POST, Sept. 17, 2008, at A3, available at <http://www.washingtonpost.com/wp-dyn/content/article/2008/09/16/AR2008091601037.html>.

168. *Id.*

169. *Id.*

170. *Id.*

171. *Id.*

its position, but risks losing credibility by relying on questionable evidence.

In addition to the FDA, the EPA could also decide to regulate BPA more strictly, but is currently standing by its fifty “safe exposure level.”¹⁷² However, because most human exposure to BPA comes through the ingestion of food or drink that has been stored in BPA-lined containers,¹⁷³ the FDA should be the regulatory agency to tackle the BPA issue in the United States. Similarly, other international food safety commissions should regulate the use of this chemical within food containers more strictly.

The mandate for the FDA to regulate can be found within its standard for food additives; since BPA is leaching from food containers into the food and drink itself, it can be considered to fall within this category. The FDA mandate, as defined in federal regulations, requires safety, which means, “that there is reasonable certainty in the minds of competent scientists that the substance is not harmful under the intended conditions of use.”¹⁷⁴ However, one of the problems with BPA is leaching that occurs not only under intended conditions, but also when people microwave these storage containers or wash them in dishwashers.¹⁷⁵ Therefore, there is a need for more public education about the dangers of improperly using these food containers, and a margin of safety should be built in for unintended but likely consumer use.

Another pathway to greater regulation might be found through the EPA by applying either TSCA or the Clean Water Act. BPA is classified as a HPV, so it could fall within the purview of TSCA.¹⁷⁶ BPA has been found in municipal drinking water supplies and has been determined to cause fish to change genders.¹⁷⁷ Therefore, it seems BPA could be regulated under the Clean Water Act, which prevents degradation of the nation’s waters.¹⁷⁸

172. ORAL RFD ASSESSMENT, *supra* note 49.

173. NTP EXPERT PANEL REPORT, *supra* note 1, at 350.

174. 21 C.F.R. §170.3(i) (stating “Safe or safety means that there is reasonable certainty in the minds of competent scientists that the substance is not harmful under the intended conditions of use”).

175. Envtl. Health Assoc. of Nova Scotia, *Microwave Safe Plastic – Is it Really Safe?* <http://www.environmentalhealth.ca/fall07microwave.html> (last visited Oct. 16, 2009).

176. TSCA, *supra* note 47.

177. David A. Fahrenthold, *Male Bass Fish Across Region Found to be Bearing Eggs*, WASH. POST, Sept. 6, 2006, at A1, available at <http://www.washingtonpost.com/wp-dyn/content/article/2006/09/05/AR2006090501384.html>.

178. Clean Water Act, 33 U.S.C. §§ 1251-1387 (2001) (Section 404).

In addition to addressing issues of food safety, there is also the larger aspect of environmental safety, which could be addressed by international environmental safety agencies such as Environment Canada. Environment Canada has called attention to plant and animal studies, citing gender-altering effects in fish¹⁷⁹ and interference with nitrogen-fixing in leguminous plants.¹⁸⁰ BPA could perhaps be regulated through international agreement, as chlorofluorocarbons (“CFCs”) were monitored by the Montreal Protocol.¹⁸¹ Finally, the United States should work with the United Kingdom’s Food and Safety Administration or the EU on this issue.

While the international community has much to contribute, the United States has an opportunity to provide leadership. As the main risk of harm from BPA is through diet, the FDA is the logical agency to lead regulatory efforts. Since the FDA has not acted, Congress may need to enact legislation to direct regulatory activity, and may do so soon.

B. Proposed Federal Legislation for Banning BPA

There are current efforts to pass legislation to ban the use of BPA in food and beverage containers as well as infants’ and children’s products. House Resolution 6228, the Ban Poisonous Additives Act, was first introduced by Representative Edward Markey (Democrat-MA) in 2008. The bill would have removed BPA from food and beverage containers. This bill did not move forward in 2008.¹⁸² However, Representative Markey reintroduced similar legislation in March 2009.¹⁸³ The scope of the ban has also been expanded, this time proposing “to ban the use of Bisphenol A in food containers, and for other purposes.”¹⁸⁴

179. Segner et al., *Identification of endocrine-disrupting effects in aquatic vertebrates and invertebrates: report from the European IDEA Project*, 54 *ECOTOXICOLOGY & ENVTL. SAFETY* 302 (2003).

180. Fox 2007, *supra* note 16.

181. The Montreal Protocol on Substances that Deplete the Ozone Layer (2000), available at <http://www.unep.org/OZONE/pdfs/Montreal-Protocol2000.pdf>.

182. Ban Poisonous Additives Act of 2008, H.R. 6228, 110th Cong. (2008), available at http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_bills&docid=f:h6228ih.txt.pdf.

183. Press Release, Daniel Reilly, Markey, Feinstein and Schumer Introduce Federal Ban on BPA in Food & Beverage Containers, (Mar. 13, 2009), available at http://markey.house.gov/index.php?option=com_content&task=view&id=3565&Itemid=141.

184. To Ban the Use of Bisphenol A in Food Containers and for Other Purposes, H.R. xxxx, 111th Cong. (Mar. 13, 2009), available at http://markey.house.gov/docs/consumer_protection/2009bpalegislation.pdf.

VIII. THE PRECAUTIONARY PRINCIPLE AND THE UNCERTAIN FUTURE: WHY BPA SHOULD BE BANNED

Although some questions remain, there is strong evidence that BPA is having a long-term deleterious effect on the reproductive and metabolic systems of humans. In the absence of certainty, governments and citizens must decide how substances should be regulated. In general, there are two major approaches to regulation: the precautionary principle and the unreasonable harm standard.

The precautionary principle states that, in the absence of scientific consensus that a chemical or other substance is safe, the burden of proof should fall on the party advocating an action.¹⁸⁵ The government of Canada subscribes to the precautionary principle, so the burden of proof falls on industry to demonstrate that a product is safe. In this case, BPA would be limited in consumer products until industry could demonstrate that BPA is not harmful.

On the other side lies the unreasonable harm standard, in which case the burden of proof is on the consumer to show that a product is unreasonably harmful before restrictions will be placed on it. The United States currently follows this paradigm.

The regulation of toxics such as BPA under the current U.S. model is problematic as the system places the burden of proof squarely on consumers once a product has been placed into the market.¹⁸⁶ In situations such as these, when animal and epidemiological studies are discounted, and there is no requirement that products be independently certified for safety, “the American citizenry are, in effect, human guinea pigs for the commercial creations of American industry. Our children are even more likely to be experimented upon and the harms may be more difficult to detect.”¹⁸⁷ The federal government is placing the success of industry over the health of American babies and toddlers.

Although the United States has not traditionally adopted the precautionary principle in uncertain situations, the federal government must change its paradigm that harm must be definitively proven before consumers can be protected. There is mounting evidence that BPA may be causing long-term, chronic health problems in our population. It

185. Sci. and Envtl. Health Network, *The Precautionary Principle: A Common Sense Way to Protect Public Health and the Environment* (Jan. 2000), <http://www.mindfully.org/Precaution/Precautionary-Principle-Common-Sense.htm>.

186. Carl F. Cranor, *Do You Want to Bet Your Children's Health on Post-Market Harm Principles? An Argument for a Trespass or Permission Model for Regulating Toxicants*, 19 VILL. ENVTL. L.J. 251, 278 (2008).

187. *Id.* at 283.

seems that until this harm can be evaluated fully, the prudent thing to do would be to make efforts, at a minimum, to protect our most vulnerable populations. Because many of the effects of endocrine disruptors are observed during development of physiological systems, infants should be protected most. Therefore, BPA should be eliminated from infant and child products, and alternatives should immediately replace BPA in baby bottles and formula cans.

Infants and developing fetuses are at greater risk of harm from endocrine disruptors because their impact on developing systems can result in lifelong adverse effects.¹⁸⁸ In addition, developing children are more susceptible to harm from low levels of toxicants than adults or older children at the same level of exposure.¹⁸⁹ Because young people are more susceptible, and because diet is the main pathway of exposure, BPA should be eliminated from infant and children's products.

In many ways, the mounting evidence that BPA is causing harm parallels the history of tobacco regulation. When scientists first observed that smoking was causing lung and other cancers, the tobacco industry denied these allegations.¹⁹⁰ As in the tobacco cases, there are efforts afoot on behalf of the chemical industry to dismiss scientific studies showing that their product is detrimental to the public health.¹⁹¹

In addition, discussion of BPA's reproductive effects is reminiscent of another endocrine disruptor, DES.¹⁹² As described above, DES was an endocrine disrupting chemical originally prescribed to pregnant women to prevent miscarriages and other pregnancy complications. The FDA withdrew its support of this use for the drug once more was known about the reproductive cancers (i.e. breast, cervical, ovarian) which occurred in the daughters of women who had taken the drug.¹⁹³ Courts have been fairly sympathetic to DES suits. In *Sindell v. Abbott Laboratories*,¹⁹⁴ the court was willing to apply market share liability to attribute causation to all of the producers according to their share of the production. In that case a specific pill was linked to a specific harm.¹⁹⁵ Establishing

188. *Id.* at 251-52.

189. *Id.* at 260. See also Philippe Grandjean & Philip J. Landrigan, *Developmental Neurotoxicity of Industrial Chemicals*, 368 LANCET 2167 (2006).

190. Lyndsey Layton, *Studies on Chemical in Plastics Questioned*, WASH. POST, Apr. 27, 2008, at A01, available at <http://www.washingtonpost.com/wp-dyn/content/story/2008/04/26/ST2008042602242.html>.

191. David Michaels, *Foreword: Sarbanes-Oxley for Science*, 69 LAW AND CONTEMP. PROBS. 1, 2 (2006).

192. Noah Sachs, *Blocked Pathways: Potential Legal Responses to Endocrine Disrupting Chemicals*, 24 COLUM. J. ENVTL. L. 289, 298 (1999).

193. *Id.* at 298-99.

194. *Sindell*, 607 P.2d 924.

195. *Id.*

causation may be impossible for BPA because the chemical is so pervasive. Therefore, class action lawsuits alone may not remedy the problem.

State bans also may have some effect but chemical additives in food products are best regulated at the national level. The FDA's mission statement is as follows: "The FDA is responsible for protecting the public health by assuring the safety, efficacy, and security of . . . our nation's food supply."¹⁹⁶ It seems incredible that the FDA, entrusted with defending public health and safety,¹⁹⁷ would continue to rely on older studies and methodologies for evaluating the effects of endocrine disruptors and discount more recent evidence. As the FDA reconsiders whether to regulate BPA, more credence should be given to studies using modern, more quantitative methods, which have shown the harmful effects of endocrine disruptors, notably BPA. In particular, the FDA should ban BPA from food and drink containers, especially baby bottles and formula cans.

IX. CONCLUSION

The FDA should take a leadership role by regulating BPA. The ultimate goal should be a ban on the use of BPA in all food and beverage packaging, as well as a ban on the use of BPA in consumer products for children under three years old, with a focus on removing BPA from items that would enter a baby's diet. There are several plausible mechanisms for achieving this goal. First, BPA should be limited through voluntary partnerships with the plastics industry and retailers; this has already proven very effective. However, voluntary partnerships can be rescinded and are not monitored. Therefore, a permanent solution requires passing appropriate legislation to encourage regulation on the part of the FDA, as well as by other international food safety organizations. For many products, a gradual phase-out may be appropriate. However, immediate action is required for baby bottles, formula cans, baby food containers, and other products that introduce BPA directly into the diet of infants. Therefore, a federal ban should be placed on the use of BPA in children's products in the United States, and international partnerships should be built to eliminate this problem worldwide.

196. U.S. Food & Drug Admin., What We Do, *available at* <http://www.fda.gov/opacom/morechoices/mission.html> (last visited Sept. 18, 2009).

197. *Id.*

Keeping it Local: Improving the Incentive Structure in Community-Based Natural Resource Management Programs

Katherine L. Babcock*

ABSTRACT

For many years, conservation policymakers viewed wildlife conservation and economic development as conflicting and incompatible objectives. Community-Based Natural Resource Management programs are an innovative approach to harmonizing these two vital goals. By developing an incentive structure that allows indigenous communities to economically benefit from their efforts to protect wildlife populations, these programs encourage conservation at a local level. Through an examination of two Community-Based Natural Resource Management programs in Africa, this Note argues that this incentive structure is strongest when communities have meaningful wildlife management authority and sufficient property rights over the land they occupy.

I. INTRODUCTION

When governments allow people to benefit directly from environmental protection, experience shows that people respond to these incentives and find ways to maintain and improve their natural environments. The key is creating appropriate incentives within an institutional environment that effectively devolves rights to manage natural resources and encourages entrepreneurial activities.¹

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1. Karol Boudreaux, *A New Call of the Wild: Community-Based Natural Resource*

Community-Based Natural Resource Management (“CBNRM”) programs take a unique approach to resource management and seek to reconcile the seemingly conflicting goals of wildlife conservation and economic development. These programs aim to create an incentive structure that encourages local people to conserve and sustainably manage wildlife by tying economic benefits to environmental protection.² CBNRM programs are premised on the idea that “if local people participate in wildlife management and economically benefit from this participation, then a ‘win-win’ situation will arise whereby wildlife is conserved at the same time as community welfare improves.”³ The key to creating and maintaining this win-win situation is building a legal framework that rewards wildlife management decisions that sustain healthy wildlife populations and encourage investment in wildlife conservation.

This Note looks at two CBNRM programs in Africa, the Communal Areas Management Programme for Indigenous Resources (“CAMPFIRE”) in Zimbabwe and the Namibian Conservancy Program, and considers each program’s development and organization, its legal framework, and its effectiveness. The successes and limitations of these programs demonstrate that the incentive structure necessary for long-term success requires a legal framework that possesses two important features.

First, central governments must sufficiently delegate wildlife management authority to the local level. When conservancies⁴ can make their own management decisions they are able to respond and adapt to local conditions. Greater autonomy in decisionmaking gives conservancies an increased stake in the results of their conservation plans and reinforces the link conservancy members feel between their conservation efforts and the economic benefits produced. This link incentivizes continued responsible management.

Second, the legal framework must also give conservancies clear and sufficient property rights. The incentive to invest in wildlife conservation created by allowing communities to benefit from their management

Management in Namibia, 20 GEO. INT’L ENVTL. L. REV. 297, 298–99 (2008).

2. See Brian T.B. Jones, *Policy, Institutions and Practice: The Impact of Namibian CBNRM Policy and Legislation on Rural Livelihoods* 6–7 (Wildlife Integration for Livelihood Diversification (WILD) Project, Working Paper No. 25, 2003) available at <http://www.met.gov.na/programmes/wild/WILDworkingpapers24-26/WP25-PIPSJones.pdf>.

3. Lucy Emerton, *The Nature of Benefits and the Benefits of Nature*, in AFRICAN WILDLIFE AND LIVELIHOODS 208, 208 (David Hulme & Marshall Murphree eds., 2001).

4. For the sake of simplicity, this Note will refer to local communities that have organized into a CBNRM program as “conservancies” and the people within them as “conservancy members.”

choices is reduced when central governments retain ownership over the land and wildlife. Without these clear property rights, “open-access” problems develop, encouraging irresponsible resource use.⁵ Furthermore, although communities may profit from conservation, their willingness to engage in conservation efforts is limited when they do not hold significant property rights to the land and wildlife they are protecting. More complete property rights would further encourage investment in infrastructure for conservation-related industries like tourism.

Despite the various ideological and political barriers that may hinder the incorporation of these features into a CBNRM program’s framework, the long-term success of these programs depends on the motivation of local communities to conserve wildlife. Delegating management authority and granting communities meaningful property rights provides this motivation.

II. ORIGIN AND DEVELOPMENT OF CBNRM CONSERVATION

A. The CBNRM Philosophy

CBNRM is based on the premise that indigenous populations should have control over the use and management of the natural resources around them. This system of management focuses on the positive role local communities can play in preserving and sustaining wildlife. CBNRM developed as an alternative to previous systems of wildlife management, which viewed local communities as “enemies” of wildlife and conservation efforts.⁶ “The underlying thinking of [CBNRM] is that local communities have been alienated from a resource they should rightfully own, control, manage, and benefit from.”⁷

While many different varieties of CBNRM programs exist across the globe, these programs generally seek to recognize the values of traditional knowledge and culture as they relate to conservation. Proponents of these programs stress that “[i]ndigenous and other traditional people have long associations with nature and a deep understanding of it. Often they have made significant contributions to the maintenance of many of the earth’s most fragile ecosystems.”⁸ CBNRM

5. See generally Boudreaux, *supra* note 1, at 323–24 (discussing the unauthorized use by outsiders of land in local communities).

6. Alexander N. Songorwa et al., *Community-Based Wildlife Management in Africa: A Critical Assessment of the Literature*, 40 NAT. RESOURCES J. 603, 605–06 (2000).

7. *Id.* at 606.

8. WORLD CONSERVATION UNION ET AL., PRINCIPLES AND GUIDELINES ON

programs depend on understanding the “links between biological and cultural diversity”⁹ and a proper legal framework that strengthens the relationship between healthy wildlife populations and successful local communities.

The structure of CBNRM is distinct from methods of management that depend upon national laws and enforcement by state actors. CBNRM emphasizes delegation of authority over natural resources from the state to defined local populations.¹⁰ Local populations obtain the authority to manage resources within a framework that creates incentives to manage resources sustainably. Once the principal of responsible management is established within communities, the principal is reinforced “by the prospect and realization of benefits flowing from the results of taking responsibility.”¹¹ By giving conservancies an economic stake in the successful management of the wildlife within their territory, CBNRM combines resource conservation and economic development.

B. The Development of CBNRM Conservation

1. Colonialism and the Failure of the “Fines and Fences” Approach

CBNRM developed as a response to the failure of what is known as the “fines and fences” approach.¹² If CBNRM is thought of as using “carrots” (rewards) to induce conservation, the “fines and fences” approach utilizes “sticks” to threaten people into compliance with conservation policies.

The “fines and fences” approach, in which wildlife is owned and controlled by the national government, is a conservation and resource management system whose use in Africa has roots in African colonial traditions.¹³ As colonial governments took hold of the African continent in the nineteenth century, they brought much of the wildlife, land, and natural resources under the control of central governments.¹⁴ Colonial

INDIGENOUS AND TRADITIONAL PEOPLES AND PROTECTED AREAS pt. 2, princ. 1, at 5 (2000), available at www.wwf.fi/wwf/www/uploads/pdf/indigenous_people_policy.pdf

9. WORLD WILDLIFE FUND FOR NATURE, ENGAGING THE STEWARDS OF NATURE: PARTNERING WITH INDIGENOUS PEOPLES AND LOCAL COMMUNITIES 1, available at <http://www.worldwildlife.org/what/communityaction/people/WWFBinaryitem8856.pdf>.

10. Boudreaux, *supra* note 1, at 298–300.

11. Brian Jones, *The Evolution of a Community-Based Approach to Wildlife Management at Kunene, Namibia*, in AFRICAN WILDLIFE AND LIVELIHOODS 160, *supra* note 3, at 167.

12. Songorwa et al., *supra* note 6, at 605–06.

13. *Id.* at 603–04.

14. *Id.* at 603.

governments often relocated indigenous communities to state-owned communal property.¹⁵ As a result, local communities were alienated from the resources that they, or their leaders, formerly controlled.¹⁶ For example, under the Namibian colonial government, most indigenous people did not own the property they lived on; it was state-owned communal land and the wildlife on it was government property.¹⁷ “The argument . . . was that [indigenous people] did not have the knowledge, the will, or the training to manage the wildlife in a sustainable way.”¹⁸ Because the wildlife and other natural resources in these communal areas belonged to the distant government and not the local communities themselves, people living in the communal areas had little incentive to preserve wildlife or use it sustainably.¹⁹ Consequently, the link between the health of the environment and the economic prosperity of local communities was attenuated.

Even after colonial governments began retreating from the continent, colonial mentalities and this system of governmental control and ownership of resources remained. In the second half of the twentieth century, governments became more focused on conservation, but indigenous communities still had little voice in setting natural resource policy.²⁰ As post-colonial governments began developing conservation policies and programs, they often viewed the communities around protected areas as the most significant threat to the wildlife.²¹ One Congolese woman described her harrowing account of being expelled from the Kahuzi-Biega National Park in the Congo in the 1960s:

We did not know they were coming. It was early in the morning. I heard people around my house. I looked through the door and saw people in uniforms with guns. Then one of them forced the door of our house and started shouting that we had to leave immediately because the park is not our land. I first did not understand what he was talking about because all my ancestors have lived on these lands. They were so violent that I left with my children.²²

15. *Id.*

16. *Id.* at 603–04.

17. Boudreaux, *supra* note 1, at 299.

18. Songorwa et al., *supra* note 6, at 604.

19. See Edward Mutandwa & Christopher Tafara Gadzirayi, *Impact of Community-Based Approaches to Wildlife Management: Case Study of the CAMPFIRE Programme in Zimbabwe*, 14 INT’L J. SUSTAINABLE DEV. & WORLD ECOLOGY 336, 337-38 (2007).

20. Songorwa et al., *supra* note 6, at 604

21. *Id.*

22. Quoted in Marcus Colchester, *Indigenous Peoples and Protected Areas: Rights, Principles and Practice*, 7 NOMADIC PEOPLES 33, 35 (2003).

Tragically, the focus of management authorities using the “fines and fences” approach was keeping local people out of conservation and wildlife areas at all costs.²³

Under the “fines and fences” approach, conservation agencies and governments could unilaterally establish or expand conservation areas.²⁴ While distant authorities had the power to make policy, local communities paid for conservation with damaged crops and lost human lives.²⁵ Because indigenous people received few benefits from conservation, they often resorted to illegal hunting.²⁶ In response, some governments turned to harsh tactics to keep local people from using wildlife. During the late 1980s, a time of particularly rampant elephant and rhino poaching, Zimbabwe and Kenya both adopted “shoot to kill” policies against poachers.²⁷ Not surprisingly, this style of management “caused skepticism, lack of trust, and even hatred between wildlife officials and the communities in wildlife areas.”²⁸

2. *The Emergence of a Cooperative Approach: CBNRM*

Ultimately, the “fines and fences” approach to wildlife management was not successful at protecting wildlife.²⁹ Many countries were simply unable to achieve their conservation objectives utilizing this hostile and divisive method.³⁰ One commentator noted “there is a growing consensus, especially among conservationists and international conservation organizations, that the [fines and fences] approach has failed to protect the wildlife in Africa.”³¹ Many large mammal species like the elephant, rhino, and gorilla suffered increased levels of illegal hunting in the 1980s.³² By 1990, one World Bank technical paper estimated that over sixty-five percent of Africa’s original wildlife habitat

23. See *id.* See also William Adams & David Hulme, *Conservation and Community: Changing Narratives, Policies, and Practices in African Conservation*, in AFRICAN WILDLIFE AND LIVELIHOODS 9, *supra* note 3, at 10–12 (discussing the development of ‘fortress conservation’ in Africa and the resulting exclusion of residents from protected areas); Songorwa et al., *supra* note 6, at 604–05.

24. Songorwa et al., *supra* note 6, at 604.

25. Mutandwa & Gadzirayi, *supra* note 19, at 338.

26. *Id.*

27. Songorwa et al., *supra* note 6, at 604; *Zimbabwe’s Rhino Efforts Faulted*, N.Y. TIMES, July 12, 1994, at C4.

28. Songorwa et al., *supra* note 6, at 604.

29. *Id.* at 605.

30. *Id.* at 604.

31. *Id.*

32. David Hulme & Marshall Murphree, *Community Conservation in Africa: An Introduction*, in AFRICAN WILDLIFE AND LIVELIHOODS 1, *supra* note 3, at 1.

had been lost due to factors like agricultural expansion, deforestation, and overgrazing.³³

Considering these underlying causes of habitat destruction, some conservationists began arguing that “conservation activities in the field must be intimately linked with development.”³⁴ Beginning in the 1970s and 1980s, conservationists started to rethink the “fines and fences” style of management, viewing it as “anachronistic and counterproductive.”³⁵ The old approach failed to protect wildlife and created hostile relationships between communities and wildlife managers.³⁶ This failure can be traced to the exclusion of local communities from decisions about the natural resources around them:

Loss of traditional rights can reduce people’s interest in long-term stewardship of the land and therefore the creation of a protected area can in some cases increase the rate of damage to the very values that the protected area was originally created to preserve. . . . Putting a fence around a protected area seldom creates a long term solution to problems of disaffected local communities³⁷

In response to these types of criticism, conservationists began looking for a different approach to wildlife management that would not inherently conflict with the economic development needs of local communities. “It was concluded that the future of wildlife could only be ensured in a policy context where wildlife could be made an economically competitive form of land use.”³⁸ In their search for a solution to the shortcomings of the “fines and fences” approach, conservationists began working with the same local communities who were shunned in earlier conservation efforts. “[T]he conservationists retraced their footsteps further and went back to their perceived ‘enemies’ and asked for forgiveness, and proposed cooperation, partnership, and the equitable sharing of the costs and benefits of wildlife.”³⁹ By linking conservation with economic benefits, conservationists, as well as governments, began to realize the important

33. William D. Newmark & John L. Hough, *Conserving Wildlife in Africa: Integrated Conservation and Development Projects and Beyond*, 50 BIOSCIENCE 585, 586 (2000) (citing Agnes Kiss, *Living with Wildlife: Wildlife Resource Management With Local Participation in Africa* (World Bank, Technical Paper No. 130, 1990).

34. *Id.*

35. *Id.*

36. *Id.*

37. Colchester, *supra* note 22, at 36 (internal citations omitted).

38. Brian Jones & Marshall Murphree, *The Evolution of Policy on Community Conservation in Namibia and Zimbabwe*, in *AFRICAN WILDLIFE AND LIVELIHOODS* 38, *supra* note 3, at 43.

39. Songorwa et al., *supra* note 6, at 606.

role local communities could play in maintaining healthy wildlife populations.

C. International Recognition of CBNRM Philosophy

The CBNRM philosophy has garnered significant interest and attention in the decades following its development. This community-based approach “became so popular and so widely accepted during the 1990s that at times [CBNRM programs] appear to be almost a new orthodoxy, seeking to displace the conventional wisdom of state-enforced environmental protection.”⁴⁰ Since its development, the CBNRM approach to conservation has become increasingly accepted not only in Africa but also by conservation organizations and governments across the globe.

Organizations like the World Wildlife Fund for Nature (“WWF”), the World Bank, and the United Nations (“UN”) have embraced this “conceptual shift” from previous conservation methods and practices.⁴¹ In conjunction with other groups including the International Union for the Conservation of Nature (“ICUN”) and the World Commission on Protected Areas, the WWF has developed principles and guidelines addressing traditional people and protected areas.⁴² These principles assert that indigenous peoples “should be recognized as rightful, equal partners in . . . their lands, territories, waters, coastal seas, and other resources, and in particular the establishment and management of protected areas.”⁴³ The World Bank is currently sponsoring a number of community-based conservation programs in several different countries including Honduras, Niger, Indonesia, and Mexico.⁴⁴ The UN has also demonstrated a commitment to recognizing the rights of indigenous people to make decisions regarding natural resource use. In 1994, the UN Committee on Human Rights commented that in regard to cultural rights protected under the International Covenant on Civil and Political Rights:

[C]ulture manifests itself in many forms, including a particular way of life associated with the use of land resources, especially in the case of indigenous peoples. That right may include such traditional activities as fishing or hunting and the right to live in reserves protected by law. The enjoyment of those rights may require positive

40. Hulme & Murphree, *supra* note 32, at 2.

41. *Id.*

42. WORLD CONSERVATION UNION ET AL., *supra* note 8, pt. 2, princ. 1, at 5.

43. *Id.*

44. World Bank, *Active Projects Database*, <http://web.worldbank.org/external/projects/main?query=community%20based%20conservation&menuPK=51526214&theSitePK=40941&pagePK=218616&piPK=217470> (last visited Oct. 29, 2009).

legal measures of protection and measures to ensure the effective participation of members of minority communities in decisions which affect them.⁴⁵

Furthermore, several international agreements have incorporated CBNRM philosophy. A few examples include: the Charter of the Indigenous – Tribal Peoples of Tropical Forests, in which native peoples demanded ownership and management of the resources within their communities;⁴⁶ the 1992 World Congress on Protected Areas, which observed that the great majority of protected areas are inhabited predominantly by indigenous peoples, and that denying the existence and rights of residents was not only unrealistic but counter-productive;⁴⁷ and the Baguio Declaration, where “anthropologists, historians, agriculturalists, lawyers and biologists” recognized the importance of community control in conservation and called for “community-based natural resource rights.”⁴⁸

These examples demonstrate that the philosophy behind CBNRM, delegation of authority and the empowerment of local people, has taken root around the globe. While the philosophical underpinnings of CBNRM are gaining respect, successfully implementing them has been more challenging. As the case studies below demonstrate, creating programs with a proper legal framework consisting of meaningful managerial authority and sufficient property rights is vital to creating the conditions needed for sustained success.

III. CBNRM PROGRAMS AT WORK IN AFRICA: TWO CASE STUDIES

In theory, CBNRM programs work because “[w]hen governments allow people to benefit directly from environmental protection, experience shows that people respond to these incentives and find ways to maintain and improve their natural environments.”⁴⁹ The CBNRM model assumes that governments are willing and able to delegate

45. U.N. Hum. Rights Comm., *Compilation of General Comments and General Recommendations Adopted by Human Rights Treaty Bodies*, p. 40 at ¶ 7, U.N. Doc. HRI/GEN/1/Rev.1. 7 (July 29, 1994), available at <http://www1.umn.edu/humanrts/gencomm/hrcom23.htm>.

46. See International Alliance of Indigenous and Tribal Peoples of Tropical Forests, *Charter of the Indigenous and Tribal Peoples of the Tropical Forests*, art. 42, available at www.international-alliance.org/documents/charter_eng.doc.

47. Colchester, *supra* note 22, at 42.

48. Boudreaux, *supra* note 1, at 303.

49. *Id.* at 298.

significant authority and give meaningful property rights to create these incentives. As the examination of the CAMPFIRE Program and the Namibian Conservancy Program reveals, however, these assumptions are not always realized. As a result, programs cannot reach their full potential.

Two of the most well-known CBNRM programs in Africa are CAMPFIRE in Zimbabwe and the Namibian Conservancy Program. While these programs have each enjoyed some achievements, an examination of these programs demonstrates that their successes and the successes of other CBNRM programs could be greatly increased by creating legal frameworks in which significant management authority is delegated to conservancies that have clear and sufficient property rights to the land and wildlife they manage.

A. Zimbabwe's CAMPFIRE Program

CAMPFIRE is based on the principle that "local communities who take responsibility for sustainable management of resources should benefit directly and equitably from such resources."⁵⁰ Zimbabwe's post-independence government developed CAMPFIRE "as a means of addressing the increasing conflicts between people and wildlife" in the communal areas surrounding national parks and other wildlife reserves.⁵¹ The idea behind the program is that if local people can manage the wildlife in their area and financially benefit from it, they will value the wildlife and not kill it.⁵²

1. Development and Structure of CAMPFIRE

CAMPFIRE was made possible through a 1982 amendment to the 1975 Parks and Wildlife Act.⁵³ The 1982 amendment permits existing lower-level governmental entities, rural district councils ("RDCs"), to be given "appropriate authority" to manage wildlife in communal areas.⁵⁴

50. Mutandwa & Gadzirayi, *supra* note 19, at 337.

51. Diana Conyers, *Whose Elephants Are They? Decentralization of Control over Wildlife Management Through the CAMPFIRE Program in Binga District, Zimbabwe* 4 (World Res. Inst., Envtl. Governance in Africa, Working Paper No. 4, 2002), available at http://pdf.wri.org/ea_conyers.pdf.

52. *See id.* at 5.

53. James C. Murombedzi, *Devolution and Stewardship in Zimbabwe's CAMPFIRE Program*, 11 J. INT'L DEV. 287, 287 (1999).

54. *See* Diana Conyers, *Decentralization in Zimbabwe: A local Perspective*, 23 PUB. ADMIN. & DEV. 115, 118 (2003); Murombedzi, *supra* note 53, at 288; Conyers, *supra* note 51, at 5; Alfons Wabahe Mosimane & Karl Mutani Aribeb, *Exclusion Through Defined Membership in People-Centered Natural Resources Management: Who Defines?* 4 (Centre for Applied Soc. Sci. & Programme for Land & Agrarian Stud., Commons S.

These RDCs are authorized to derive revenue from the use of the wildlife.⁵⁵ For example, RDCs have the power to utilize wildlife for commercial purposes such as granting hunting concessions to safari operators.⁵⁶ It is estimated that more than ninety percent of the program's revenue comes from these sport-hunting concessions.⁵⁷ RDCs also receive revenue through tourism ventures and from the meat, hides, and ivory of elephants killed through culling, problem animal control, and natural mortality.⁵⁸ However, the RDCs also have the duty to protect local people from the wildlife and the damage it can cause.⁵⁹ Revenue can be shared with individual households in the form of payments, but typically community-level benefits dominate household benefits.⁶⁰

Individual CAMPFIRE programs within Zimbabwe begin when an RDC "asks the government's wildlife department to grant it the legal authority to manage its wildlife resources."⁶¹ This delegation is not automatic and it is granted only in areas where there is sufficient wildlife⁶² and where the RDC demonstrates its management ability.⁶³ RDCs are elected bodies comprised of one representative from each ward within the district.⁶⁴ Within a ward, six members of each village are elected to sit on the village's CAMPFIRE subcommittee.⁶⁵ The main responsibility of each village subcommittee is managing its share of the CAMPFIRE revenue.⁶⁶ Villages also send representatives to sit on ward subcommittees chaired by a counselor who sits on the district's CAMPFIRE subcommittee along with the RDC's chairman and vice chairman.⁶⁷

Africa Occasional Paper No. 14), available at <http://www.plaas.org.za/publications/occasional-papers/cbnrm/CBNRM14.pdf>.

55. Conyers, *supra* note 51, at 5. See also Murombedzi, *supra* note 53, at 288.

56. Conyers, *supra* note 51, at 5.

57. Joseph R. Berger, *The African Elephant, Human Economies, and International Law: Bridging a Great Rift for East and Southern Africa*, 13 GEO. INT'L ENVTL. L. REV. 417, 455 (2001).

58. See *id.* at 454–55.

59. See Conyers, *supra* note 51, at 11.

60. Priya Shyamsundar, et al., *Devolution of Resource Rights, Poverty, and Natural Resource Management: A Review* 23 (World Bank, Env't Econ. Series Paper No. 104, 2005), available at http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2005/11/10/000090341_20051110144328/Rendered/PDF/341140ResourceRights0EDP0110401public1.pdf.

61. Berger, *supra* note 57, at 454.

62. See Conyers, *supra* note 51, at 5.

63. See Berger, *supra* note 57, at 454.

64. Conyers, *supra* note 51, at 11.

65. Mutandwa & Gadzirayi, *supra* note 19, at 339.

66. Conyers, *supra* note 51, at 12.

67. *Id.*

2. *Legal Framework of CAMPFIRE*

Two key aspects of the program's legal framework hinder its potential success. First, the conservancy members do not have a meaningful role in making decisions about wildlife use; the management authority of local communities is limited to enforcing policies developed by others.⁶⁸ Second, the government retains ownership of the communal lands on which the program operates, so conservancy members are essentially participating in a program to protect government resources.⁶⁹

Under CAMPFIRE, the Zimbabwean government does not delegate the authority to set wildlife policy. Rather, the RDCs merely have the authority to enforce national wildlife policy. The RDCs must follow rigid procedures proscribed by the government's Department of National Parks and Wildlife.⁷⁰ Known as the CAMPFIRE Guidelines, these procedures cover most aspects of wildlife management: when hunting concessions may be granted and the number of each species that may be killed each year; how revenues received from commercial activities may be spent, including requirements that at least fifty percent must go to people in the area where the revenue was derived and no more than five percent may be spent on general administrative overhead; the structures and procedures that must be used to administer each CAMPFIRE program; and the limited conditions under which the programs may kill problem animals.⁷¹ "Local communities in CAMPFIRE areas do not formally determine wildlife production, and have only limited control of the 'benefits' so generated."⁷² These communities do not have the legal rights to use wildlife directly; they merely can gain benefits from others' use.

In addition to retaining the power to set wildlife policy, the government also retains legal ownership of the communal lands and the wildlife on them.⁷³ Under a communal land system, the land on which many traditional villages and farms are located belongs to the government, not to individual property owners or even the conservancy. The communal land system on which CAMPFIRE operates is a vestige of colonial times.⁷⁴ Much of the communal land in Zimbabwe was used as African labor reserves by the British colonial government.⁷⁵ This form

68. Conyers, *supra* note 54, at 118–119; Murombedzi, *supra* note 53, at 288; Conyers, *supra* note 51, at 5.

69. Murombedzi, *supra* note 53, at 292; Conyers, *supra* note 51, at 20.

70. Conyers, *supra* note 51, at 5; Conyers *supra* note 47, at 118.

71. Conyers, *supra* note 51, at 5.

72. Murombedzi, *supra* note 53, at 288.

73. *See id.*

74. *See id.*

75. *Id.*

of land tenure was originally designed “to create an effective basis for the indirect control of land and natural resources by the colonial state through the chiefs, and continued by the post-colonial state to retain state control over land.”⁷⁶ After gaining independence from Great Britain in 1980, the country enacted the Communal Lands Act of 1982 giving ownership of communal lands to the new government. The Act also vests RDCs with the responsibility to regulate the lands in those areas. In contrast, RDC constituents who own land privately in freehold (historically white farmers) maintain authority over the use of their land and the resources on it.⁷⁷

3. Effectiveness of CAMPFIRE

CAMPFIRE has enjoyed some success, especially in raising awareness about conservation issues at the local level.⁷⁸ However, as will be further discussed in section III below, CAMPFIRE has suffered several significant shortcomings stemming from the failure to delegate meaningful authority to the local level and the lack of local property rights to the land or the wildlife.⁷⁹

The philosophy behind the program, incentivizing local communities to use wildlife sustainably, has not been fully realized. Authority to manage wildlife has merely shifted from the central government to the RDCs. While utilizing a preexisting government structure to run the program “resulted in the somewhat rapid growth of CAMPFIRE programs, it appears to have created little empowerment in local communities, since control remained in the hands of the state.”⁸⁰ Not surprisingly, “CAMPFIRE communities do not see themselves as

76. *Id.*

77. *Id.*

78. See Mutandwa & Gadzirayi, *supra* note 19, at 338; Conyers, *supra* note 54, at 118.

79. The impact of the recent political instability in Zimbabwe on CAMPFIRE is beyond the scope of this paper. In the last several years under President Robert Mugabe, Zimbabwe has experienced a severe economic crisis, a series of government-instituted seizures of private farms, an increase in violent conflict, and a serious cholera outbreak. These problems have all drastically impacted the effectiveness of CAMPFIRE and reports out of Zimbabwe have noted “severe” wildlife losses in areas outside game reserves. The focus of this note, however, is the legal, not political, framework of CBNRM programs and how that framework can be improved to strengthen conservation incentives. For a description of recent wildlife declines in Zimbabwe see Muchena Zigomo, *Zimbabwe Wildlife Pays Cost of Economic Crisis*, REUTERS, July 2, 2007, available at <http://www.reuters.com/article/environmentNews/idUSL0262811320070703> For a brief discussion of the impact of political and economic instability on CAMPFIRE see Boudreaux, *supra* note 1, at 320–22.

80. Shyamsundar et al., *supra* note 60, at 24.

joint owners of the wildlife. Rather, they continue to see wildlife as a resource belonging to either the government or the RDC.”⁸¹ With this old mentality still prevailing, conservation is viewed as inferior to other types of land use, like grazing or farming, over which local communities and individual households have more control.⁸² Typically, households in CAMPFIRE program areas invest more money in agricultural production than they receive from CAMPFIRE revenues.⁸³ Furthermore, CAMPFIRE has not been proven to reduce illegal hunting.⁸⁴

B. Namibian Conservancy Program

The second CBNRM case study looks at the Namibian Conservancy Program. While this program is more successful at devolving power than CAMPFIRE, the lack of significant property rights over conservancy land and wildlife also ultimately limits the effectiveness of this program.

According to the government agency that manages the program, the Ministry of Environment and Tourism (“MET”), the aim of the Namibian Conservancy Program is to “provide incentives to communities to manage and use wildlife and other natural resources in sustainable and productive ways.”⁸⁵ The program seeks to create conditions that encourage biodiversity and conservation. To that end, the program promotes sustainable management and attempts to create opportunities for income generation by delegating authority over wildlife and tourism to local institutions.⁸⁶

1. Development and Structure of the Namibian Conservancy Program

Efforts to introduce the CBNRM system in Namibia began in the early 1980s when a Namibian non-governmental organization, the Integrated Rural Development and Nature Conservation (“IRDNC”), set up a community game guard program in northwestern Namibia. The goal of the program was to stop both commercial and subsistence poaching of the black rhino and the desert-adapted elephant.⁸⁷ Traditional leaders

81. Murombedzi, *supra* note 53, at 288.

82. *Id.* at 289.

83. *Id.* at 291.

84. Conyers, *supra* note 51, at 25.

85. Ministry of Environment and Tourism, *Community Based Natural Resource Management (CBNRM): Enhancing Conservation, Development & Democracy in Namibia's Rural Areas?*, <http://www.met.gov.na/programmes/cbnrm/Enhancing%20conse,%20devand%20dem.htm> (last visited Oct. 30, 2009).

86. *Id.*

87. Integrated Rural Development and Nature Conservation, *Our Early History*,

appointed people and made them responsible for catching poachers and monitoring wildlife.⁸⁸ Although this community-based approach was politically unpopular at the time,⁸⁹ Namibian independence would eventually spark an interest in this type of conservation.

After Namibia gained independence from South Africa in 1990, the post-colonial government began a comprehensive study of the problems local communities were experiencing with conservation efforts.⁹⁰ In 1995, the government developed a policy allowing for the creation of community-level conservancies. Known as the “Policy on Wildlife Management Utilization, and Tourism in Communal Areas,” the policy endeavored to ensure that “the same rights to manage wildlife that applied to freehold land also applied to conservancies on communal land.”⁹¹ Freehold landowners, typically white commercial farmers, had acquired rights over wildlife in 1968 and were “able to hunt game for their own use, buy and sell game, cull for the commercial sale of meat and entertain foreign trophy hunters on their farms.”⁹²

The 1996 Natural Conservation Amendment Act put the 1995 policy into effect. Viewed as “pav[ing] the way for a new era of conservation and natural resource management in Namibia,”⁹³ this legislation recognized communities’ rights to natural resources in conservancies, such as “ownership over huntable game and rights to revenue from the sale of game, game products, and tourism.”⁹⁴ This amendment vests conservancies with the legal right to manage and use wildlife, as well as to benefit from non-consumptive use of wildlife—tourism.

Today there are fifty registered conservancies and even more communities are in the registration process.⁹⁵ Conservancies are created when communities apply for registration with the MET.⁹⁶ For the MET to grant conservancy status, a process that can often take years,⁹⁷ the

<http://www.irdnc.org.na/history.htm> (last visited Oct. 30, 2009).

88. *Id.*

89. *Id.*

90. Boudreaux, *supra* note 1, at 304.

91. *Id.*

92. Jones & Murphree, *supra* note 38, at 41.

93. Ministry of Environment and Tourism, *supra* note 85.

94. WORLD WILDLIFE FUND FOR NATURE, *supra* note 9, at 3. *See also* Nature Conservation Amendment Act (1996) (Namib.), *available at* <http://www.lac.org.na/laws/pdf/natureconservation.pdf>; Boudreaux, *supra* note 1, at 308.

95. Boudreaux, *supra* note 1, at 308.

96. Ministry of Environment and Tourism, *Community-Based Natural Resources Management (CBNRM): Conservancies - A Simple Guide*, http://www.met.gov.na/programmes/cbnrm/cons_guide.htm (last visited Oct. 30, 2009).

97. Boudreaux, *supra* note 1, at 308.

conservancy must have a defined border, a defined membership, a legally recognized constitution that provides for a wildlife management strategy and equitable benefits, and a representative management committee.⁹⁸ In contrast with the layers of committees in CAMPFIRE, each conservancy in Namibia has a single management committee. Unlike the RDCs in Zimbabwe, which are preexisting governmental bodies with a variety of responsibilities, a Namibian conservancy's democratically-elected management committee is responsible only for the institutional management of that conservancy.⁹⁹ Legal rights to manage and use wildlife are vested in this committee rather than in individual conservancy members. Among other duties, these committees are required to maintain membership rolls, create game management plans and dispute resolution mechanisms, hold annual meetings, and report to conservancy members.¹⁰⁰

2. *Legal Framework of the Namibian Conservancy Program*

Though the Namibian program delegates authority to the local level better than CAMPFIRE, conservancies' authority over wildlife policy is still conditional and incomplete. Also, conservancies do not have sufficient property rights over the communal land on which they operate. These features of the program's legal framework limit its success.

Under this conservancy program, the Namibian government retains an important level of wildlife management authority. The MET has the power to withdraw conservancy rights and thereby maintains a significant degree of control over each conservancy's actions.¹⁰¹ Situations under which such a revocation may take place are not specified in the 1996 Natural Conservation Amendment Act and determination of a revocation would likely be left to the "whim of individual officials."¹⁰² A conservancy's authority over its wildlife is also limited because the MET retains the power to set hunting quotas for game animals.¹⁰³ Conservancies, however, can suggest trophy quotas to the ministry.¹⁰⁴ One of the program's main benefits to communities is that conservancies may use a limited number of huntable game species for personal use without quotas or licenses from the ministry.¹⁰⁵ With the exception of elephants and hippos, conservancies may also kill problem

98. Ministry of Environment and Tourism, *supra* note 85.

99. *See id.*

100. Boudreaux, *supra* note 1, at 305.

101. *Id.* at 308.

102. Jones, *supra* note 2, at 14.

103. Boudreaux, *supra* note 1, at 324.

104. Jones, *supra* note 2, at 13.

105. *Id.* at 15.

animals if necessary.¹⁰⁶ Ultimately though, “apart from deciding on own use of a small number of designated species, conservancies have few rights to determine the way in which wildlife can be used and the level of off-take.”¹⁰⁷

Like the government of Zimbabwe, the Namibian government also maintains legal ownership over communal land and wildlife. Although the legislation vests “ownership” over wildlife in conservancies, the term, in fact, inaccurately reflects the conservancies’ rights.¹⁰⁸ “The national government actually owns the land, and therefore has ultimate control of the land, but conservancies are the on-the-ground proprietors of the land.”¹⁰⁹ Because the government still maintains legal responsibility for wildlife management, actual legal ownership remains with the national government.

3. Effectiveness of the Namibian Conservancy Program

CBNRM in Namibia, implemented first through the game guard program and now through the Conservancy Program, has achieved some notable successes. The program has helped change community perception about wildlife conservation and wildlife populations have been increasing.¹¹⁰ For example, the Namibian elephant population doubled from approximately 5,000 to 10,000 between 1984 and 2000.¹¹¹ Other animal species including springbok, oryx, and mountain zebra also increased in population during that time.¹¹² However, the current legal framework creates some barriers to continued success. As discussed in the next section, although the framework of the Namibian program is an improvement over CAMPFIRE’s authority structure, a more substantial delegation of power to conservancy committees could strengthen the incentives for sustainable management. Furthermore, without property rights to the communal land and wildlife, conservancies have difficulties policing their land and excluding others, weakening the incentives to protect and sustainably manage resources.

106. *Id.*

107. *Id.*

108. *Id.* at 14.

109. Boudreaux, *supra* note 1, at 323.

110. *Id.* at 309.

111. *Id.*

112. *Id.*

IV. CREATING THE PROPER LEGAL FRAMEWORK IS KEY FOR LASTING SUCCESS IN CBNRM

Unlike “fines and fences” conservation, which involves coercing communities into obeying wildlife policies, CBNRM programs motivate conservancies to protect wildlife by tying conservation to economic benefits. Creating a framework that provides these incentives is therefore crucial to a program’s success. Two key elements of this legal framework, delegation of management authority and sufficient and clear property rights, work together to stimulate community commitment to conservation. Both these features are needed to maximize the potential of CBNRM programs.

A. Delegation of Management Authority Incentivizes Conservation

“Ideally, the delegation of extra responsibility toward communities should be accompanied by commensurate power and authority.”¹¹³ This ideal has not been realized in CAMPFIRE, as Zimbabwe has declined to delegate meaningful authority over wildlife to local communities. Namibia, however, has decentralized wildlife authority more effectively than Zimbabwe, giving residents more autonomy when making decisions about how to use wildlife. When conservancies have meaningful managerial control and are able to participate in making wildlife policy decisions, members feel a more direct link between their actions to conserve and the economic benefits created, giving them a larger stake in the success of the conservation program. This increased stake incentivizes responsible and sustainable natural resources use. Unfortunately, both Namibia and Zimbabwe share the colonial legacy of a highly centralized resource management system, contributing to the difficulty of transitioning to a more locally-based management structure.

1. CAMPFIRE Fails to Adequately Delegate Management Authority

Zimbabwe has not delegated sufficient management and decisionmaking power to the local level. As a result, the link between conservation decisions and economic benefit is only weakly present in CAMPFIRE. Although communities do receive some income from wildlife, the relationship of this money to conservation choices is minimal because “they have little control over wildlife management, no equity in wildlife utilization, and few opportunities to provide goods and services to the wildlife industry.”¹¹⁴

113. Shyamsundar et al., *supra* note 60, at 87.

114. Murombedzi, *supra* note 53, at 289.

CAMPFIRE's enabling legislation, the 1982 amendment to the 1975 Parks and Wildlife Act, merely designates participating RDCs as the "appropriate authority" to manage wildlife while the central government retains actual legal authority.¹¹⁵ The CAMPFIRE Guidelines the RDCs must follow are so prescriptive as to limit local participation, thereby precluding local influence, ideas, and systems.¹¹⁶

This rigid system stands in sharp contrast to the flexible policies advocated by conservation experts. In its analysis of CBNRM best practices, the WWF recommends that CBNRM legislation provide a broad framework that communities can work within rather than inflexible rules.¹¹⁷ Authority should be delegated and structured in such a way that "resources users can take decisions themselves without always having to have decisions endorsed or sanctioned by government . . . CBNRM policy needs to be flexible in order to take into account the diversity of cultures and of social organization within each country."¹¹⁸ Sustained success is difficult where local people do not have the freedom to choose how to manage their resources.

To be sure, benefits derived from imposed management decisions do more to warm conservancy members to conservation than no benefits at all. But long-term conservation interests are better served when conservancies are brought into the process and given opportunities to influence policy. Increased participation gives conservancies a larger stake in the outcome of conservation policies and reinforces the link conservancies feel between their choices and economic rewards. However, until this ideal of delegation of authority is closer to realization, CAMPFIRE seems more like a modified "fines and fences" approach. While local people are at least compensated for some of the conservation costs they bear, they are not free to make their own conservation policies and benefit from their choices.

2. Namibia: A Better Model for Management Delegation

The Namibian Conservancy Program, in contrast, allows individual conservancies more autonomy in determining how to use their resources. The Namibian government generally has allowed conservancies to define themselves and develop their own governance and management

115. Songorwa et al., *supra* note 6, at 619.

116. Conyers *supra* note 54, at 118; Conyers, *supra* note 51, at 5.

117. See BRIAN T.B. JONES, WORLD WILDLIFE FUND FOR NATURE, SUMMARY REPORT: LESSONS LEARNED AND BEST PRACTICES FOR CBNRM POLICY AND LEGISLATION IN BOTSWANA, MALAWI, MOZAMBIQUE, NAMIBIA, ZAMBIA AND ZIMBABWE 6 (2004), available at http://www.tnrf.org/files/E-INFO_WWF_SARPO_CBNRM_Summary_Report_0.pdf.

118. *Id.* at 3.

apparatus.¹¹⁹ One researcher, in comparing the Namibian program to CAMPFIRE, noted that the Namibian method “seems to promote a greater sense of autonomy and is a truer bottom-up approach to both rural development and natural resource conservation.”¹²⁰

One example of greater participation in management decisions is demonstrated by the roles of each program's committees. Whereas the main responsibility of the local agents of CAMPFIRE, the ward and the village committees, is to oversee the use of CAMPFIRE revenue,¹²¹ Namibian conservancy committees are more actively involved in the actual management of resources. Namibian conservancy committees must draft constitutions providing for sustainable management of wildlife¹²² and develop management plans for their resources.¹²³ Additionally, the conservancies have freedom to use some types of huntable wildlife without permits and quotas.¹²⁴ Even with respect to species capped by quota, Namibian conservancy members can decide how those limited number of animals will be used. For example, conservancies might allow hunting by members, sale of permits to trophy hunters, or even the sale of live animals.¹²⁵ Unlike Zimbabwe, the Namibian government has demonstrated a willingness “to allow conservancy development to be locally driven.”¹²⁶

Despite Namibia's progress in relation to Zimbabwe, Jones and Boudreaux have each recommend further devolution of power, including the rights for conservancies to set their own trophy quotas and manage all problem animals.¹²⁷

119. Boudreaux, *supra* note 1, at 320.

120. *Id.*

121. One study indicated that the village level committees in some CAMPFIRE districts exist on paper only and are therefore not effective representative bodies. As a result, it is difficult for local needs and concerns about conservation policies to be heard. *See Conyers, supra* note 51, at 11.

122. Ministry of Environment and Tourism, *supra* note 96.

123. Boudreaux, *supra* note 1, at 306.

124. Jones, *supra* note 2, at 15.

125. *Id.* at 9.

126. Boudreaux, *supra* note 1, at 320.

127. *See id.* at 335; Jones, *supra* note 117, at 12–16; Karol Boudreaux, *Community-Based Natural Resource Management and Poverty Alleviation in Namibia: A Case Study* 52 (Mercatus Policy Series, Policy Comment No. 10, 2007), available at <http://www.mercatus.org/uploadedFiles/Mercatus/Publications/Community-Based%20Natural%20Resource%20Management.pdf> (generally, problem animals are those who come into conflict with humans and threaten human life or livestock).

3. Barriers to Achieving Greater Delegation of Management Authority

While delegating authority to the local level is ideal, governments must first be willing to devolve this authority. “An emphasis on ‘the community’ [aspect of CBNRM programs] is an idea that is still only being absorbed by most conservation bureaucracies.”¹²⁸ There are several barriers that make significant delegation difficult or impractical for many CBNRM programs, including CAMPFIRE and the Namibian Conservancy Program, to obtain.

One barrier to delegation is the perception that wildlife is a “national heritage,” which should be managed centrally for the benefit of the whole nation.¹²⁹ This view of wildlife stems from several sources. One commentator has argued that this view is a legacy from colonial attitudes towards the abilities of indigenous people to care for natural resources.¹³⁰ A step towards overcoming this barrier is government realization that policies based on this view encourage illegal hunting and other irresponsible behavior because, from the perpetrator’s perspective, they are benefiting at the expense of the government and not at the expense of their community. However, CBNRM programs that delegate only partial authority are at least a step in the right direction and could ultimately help wear down this barrier. As communities gain experience in managing their resources, old assumptions about the ability of local communities to care for wildlife may gradually dissipate and governments could be willing to delegate greater authority. This “national heritage” view of wildlife also reflects the valid concern that conservancies may elect not to use wildlife sustainably or enact polices inconsistent with conservation principles. These concerns could be addressed by requiring conservancies to meet nationally set standards but also allowing them to participate in setting those standards and giving them flexibility to develop local management practices.

A second barrier is a bureaucratic impulse to hold on to power.¹³¹ National officials often resist devolution of power because “their position and status, and sometimes even their continued existence depends on the extent of their authority.”¹³² Even when central governments agree to

128. David Hulme & Marshall Murphree, *Community Conservation as Policy: Promise and Performance*, in *AFRICAN WILDLIFE AND LIVELIHOODS* 280, *supra* note 3, at 283.

129. Edward B. Barbier, *Community-Based Development in Africa*, in *ECONOMICS FOR THE WILDS: WILDLIFE DIVERSITY AND DEVELOPMENT* 103, 103 (Timothy M. Swanson & Edward B. Barbier eds., 1992).

130. *Id.*

131. *See* Conyers, *supra* note 51, at 26.

132. *Id.*

give up some of their management authority, local communities are not necessarily empowered as a result. Other levels of government merely step into the central government's place and continue to dictate policy to local communities. This problem has plagued CAMPFIRE. In Zimbabwe, "the 'decentralization' of CAMPFIRE has become 'recentralization' to a district-level elite."¹³³ Many RDCs choose to retain the minimal management authority the government gives them instead of devolving it to local communities.¹³⁴ One possible solution may be for CBNRM programs to vest authority in a specific management structure, with democratically elected administrators, created solely to run the program. This structure would bypass pre-existing governmental bodies that could be prone to hoarding power. Namibia has utilized this type of system and has been able to more fully delegate authority than Zimbabwe.

Finally, some governments tend to view local authority and grassroots participation as politically threatening.¹³⁵ Theoretically, CBNRM programs work to both conserve wildlife and spark community development. Some governments may view the community empowerment that accompanies increases in revenue and economic options as potentially destabilizing.¹³⁶ Generally, political factors, including the type and structure of the national government and the quality of national leadership, affect whether the central government is comfortable devolving power. A strong and stable democratic government can lower this barrier to the devolution of authority. This barrier likely will be a significant hurdle for Zimbabwe. The political situation in the country has been extremely volatile in recent years and further delegation of authority is not likely to occur in this unstable environment.¹³⁷ However, the creation of a new coalition government, led by Prime Minister Morgan Tsvangirai, seems to have had positive effects on the political and economic situation in Zimbabwe.¹³⁸ Namibian conservancies, meanwhile, do not face this barrier as the government there "has been stable and non-predatory," allowing conservancy development to be locally driven.¹³⁹

Despite these significant hurdles to decentralizing management power, delegation of management authority is a necessary step to

133. Jones & Murphree, *supra* note 38, at 49.

134. Boudreaux, *supra* note 1, at 320–21.

135. See Hulme & Murphree, *supra* note 32, at 5.

136. *Id.*

137. See Boudreaux, *supra* note 1, at 320–21.

138. See Scott Johnson, *Africa's Worst Job*, NEWSWEEK, Oct. 5, 2009, available at <http://www.newsweek.com/id/216212> (last visited Nov. 9, 2009).

139. Boudreaux, *supra* note 1, at 320.

sustaining the success of CBNRM programs. As James Murombedzi, former regional director of the ICUN, observed, “if the [CBNRM] programme is to be effective in the future there has to be complete and unambiguous devolution of control over resources to the communal residents themselves. They must determine how wildlife is to be used and what role wildlife should play in the evolving patterns of land use in these difficult environments.”¹⁴⁰

B. Sufficient Property Rights Further Strengthen Conservation Incentives

Along with better devolution of authority, vesting sufficient property rights with conservancies is an important part of creating a successful incentive structure. Both CAMPFIRE and the Namibian Conservancy Program would benefit from the strengthened incentive structure that better property rights would foster.

A major factor behind the failure of “fines and fences” conservation was that people had little incentive to conserve wildlife that did not belong to them or invest in developing conservation-related industries. CBNRM operates on the assumption that people will manage and care for resources they own better than resources belonging to the government.¹⁴¹ In essence, “if property owners can personally benefit from the effective use and maintenance of property, they are more likely to expend resources identifying valuable ways to use and conserve property.”¹⁴² For CBNRM programs to be effective, local communities must recognize that the sacrifices and investments they make to conserve wildlife, like reducing agriculture or suffering damage from animals, are benefiting their own resources.

Full privatization of land resources down to the household level is not necessary to generate the desired incentives. If individual conservancies hold property rights to the land and wildlife within their borders, that delegation likely is adequate to create a “mechanism to reduce losses associated with open-access resources.”¹⁴³ Conservancy ownership, though still a form of communal ownership, is not subject to the same degree of “tragedy of the commons” problems as government-owned communal land. If conservancies have legally-defined memberships and borders, as CAMPFIRE and the Namibian

140. Murombedzi, *supra* note 53, at 292.

141. See I. BOND ET AL., WORLD WILDLIFE FUND FOR NATURE, COMMUNITY-BASED NATURAL RESOURCE MANAGEMENT MANUAL 8–9 (2006), available at http://assets.wwf.no/downloads/cbnrm_manual.pdf (last visited Nov. 9, 2009).

142. Boudreaux, *supra* note 127, at 4.

143. Boudreaux, *supra* note 1, at 310.

Conservancy Program do, sufficient property rights mean conservancies “[do] not have to be concerned with the possibility of ‘open access,’ namely the risk that additional exploiters might have free entry to the resource.”¹⁴⁴

1. Neither Country Vests Sufficient Property Rights with Conservancies

Under the CBNRM programs in Zimbabwe and Namibia, local communities can potentially benefit from revenue wildlife generates, but they do not have full ownership over the land or the wildlife. To understand the various types of property rights, it is helpful to think of conservancies’ property rights over communal land and wildlife as “sticks” in a bundle. Arguably, the greater the bundle of rights conservancies holds, the more likely its community management will succeed. The most important “sticks” conservancies need are the rights to access, withdraw, manage, exclude, and alienate natural resources.¹⁴⁵ Additionally, it must be clear who within conservancies has authority over these “sticks.” Regrettably, these two CBNRM programs hold only minimal “sticks” in their bundles, which do not encourage large investments in conserving and protecting the land and the wildlife.

In Zimbabwe, local people often do not feel that they have any “sticks” because benefits and revenue from wildlife are usually distributed at the community, rather than individual, level.¹⁴⁶ One researcher, having conducted household interviews in five villages within one CAMPFIRE ward, found that most villagers did not feel they were economically benefiting from the program and they did not have total user-rights over the resources.¹⁴⁷ Another researcher, finding similar results in a different district, concluded that administrative inefficiency, investments in unfeasible projects, and deliberate abuse are often the reasons why local wards and villages do not get a significant share of the revenue.¹⁴⁸ This failure to realize concrete benefits from conservation is likely at the root of why many communities’ priority is developing agriculture instead of conservation-related industries and why the program has not had a proven impact on illegal hunting.¹⁴⁹

144. Paul Seabright, *Managing Local Commons: Theoretical Issues in Incentive Design*, 7 J. ECON. PERSP. 113, 113–14 (1993).

145. See Shyamsundar, et al., *supra* note 60, at 26

146. See Shyamsundar, et al., *supra* note 60, at 23. See also Mutandwa & Gadzirayi, *supra* note 19, at 341-42.

147. Mutandwa & Gadzirayi, *supra* note 19, at 341.

148. Conyers, *supra* note 51, at 23.

149. See Murombedzi, *supra* note 53, at 291 (noting that “household investment in agricultural production far exceeds CAMPFIRE revenues per household”); *id.* at 25

A more complete system of local ownership could alleviate this problem and intensify conservation incentives:

The strength of ownership correlates closely with the strength of collective incentives to make the allocations of time, labor, land and resources necessary to make [CBNRM programs] work. . . . The strength of tenure, the duration of this ownership, is central to a community's conservation perspectives since it shapes the incentives to invest in the future.¹⁵⁰

When ownership rights are insecure and there is only a small possibility of economically benefiting from property, there is less incentive to conserve and nurture that property. If conservancy members in CAMPFIRE communities were better able to access, withdraw, and manage wildlife themselves and were not dependent on higher-level district agencies to carry out these functions (if they are carried out at all), the wildlife would hold a greater value to them. As the Namibian program will illustrate, however, an even larger bundle of property rights, including the rights of exclusion and alienation, would further strengthen investment in conservation.

Although Namibian conservancies possess more comprehensive property rights than do CAMPFIRE communities, the lack of secure property rights is still the “main constraint” to [CBNRM] within Namibia.¹⁵¹ The inability to exclude non-conservancy members from lands within conservancies, coupled with uncertainties over who controls the property rights of conservancies, limits the success of the program. Moreover, the example of Namibian freehold farmers indicates that the ability to alienate property might further increase investment in conservation.

One important “stick” missing from Namibian conservancies' bundle is exclusivity. Namibian conservancies do not have the ability to exclude outsiders from their lands in major part because the Namibian constitution grants citizens the right to “move freely” throughout Namibia.¹⁵² Often, the government does not police the land effectively, so conservancies are left without means to restrict outsiders' access to land within the conservancy.¹⁵³ Intrusions can come in the form of

(explaining that the CAMPFIRE Program in the Binga District of Zimbabwe has failed to replace agriculture as the main source of livelihood in program areas and has not significantly reduced illegal hunting).

150. Edmund Barrow & Marshall Murphree, *Community Conservation: From Concept to Practice*, in *AFRICAN WILDLIFE AND LIVELIHOODS* 24, *supra* note 3, at 30–31.

151. Jones, *supra* note 2, at 25.

152. NAMIB. CONST. art. 21(g) (describing the right to “move freely throughout Namibia” as a “fundamental freedom”).

153. Boudreaux, *supra* note 1, at 323.

unauthorized tourists, campers, and grazers.¹⁵⁴ Conservancies would like to maintain and protect their resources, but without the authority to keep out unwanted outsiders, “conservancies are forced to bear the costs associated with these intrusions (such as lost income and potential damage).”¹⁵⁵ When communities have difficulties excluding outsiders, there is a risk that land and wildlife will become “open access” resources where individuals can benefit at the expense of the community.¹⁵⁶ The costs associated with not having the right to exclude diminish the value of the property to the conservancy members. As the value of the property declines, so does the incentive to take care of it. Allowing conservancies to exclude outsiders and police the land themselves would increase the value of the land and wildlife.

Another problem with Namibian conservancies’ bundle of rights is uncertainty over who actually holds them. There appears to be confusion among conservancy members on communal lands as to where rights are vested.¹⁵⁷ A study by the Wildlife Integration for Livelihood Diversification Project found that “residents would cite more than one governing body for land allocation including the Government, Traditional Authorities and the conservancy.”¹⁵⁸ Under Namibia’s customary law, traditional authorities like chiefs have the power to allocate land use unless their authority is superseded by constitutional or statutory rules.¹⁵⁹ These traditional authorities have the right to allocate land for grazing or residential use.¹⁶⁰ However, Communal Land Boards (“CLBs”) have veto authority over the decisions of traditional authorities. CLBs have representatives from conservancies within their jurisdiction but other board members, including representatives of traditional authorities, could override their concerns.¹⁶¹ So “although conservancies can zone land within their borders, CLBs or traditional authorities can potentially override zoning decisions.”¹⁶² Not surprisingly, this confusing situation has the potential to create conflicts over land use. The uncertainty of where these limited property rights lay is like a clouded title. When ownership of certain property rights is in doubt, the value of the property to potential owners falls. As value falls, so do incentives to manage the property responsibly and make

154. *Id.*

155. *Id.*

156. Mosimane & Aribeb, *supra* note 54, at 3.

157. *See* Jones, *supra* note 2, at 25.

158. *Id.*

159. Boudreaux, *supra* note 1, at 322.

160. *Id.*

161. *See id.*

162. *Id.* at 323.

investments in it. Resolving the respective spheres of authority of the CLBs and traditional authorities, creating a clear process for decisionmaking, and including a system of checks and balances that respects the clarified roles of the CLBs and traditional authorities could address the problems created by this uncertainty.

Conservancies possess the same level of proprietorship over wildlife as freehold farmers, but the additional benefit of landownership creates further advantages for freehold owners. These advantages include not only stronger rights of enforcement against trespassers, but also the ability to use land as collateral for raising capital to build game ranches and develop tourism enterprises.¹⁶³ As it stands now, conservancies are unable to alienate land and therefore cannot raise capital in this way. While Nambian conservancies possess a more complete set of rights than CAMPFIRE programs, exclusivity, certainty, and the right of alienation would allow for a more complete replication of the incentive structure that has fostered conservation and sustainable use on freehold land.

2. Barriers to Vesting Conservancies with Sufficient Property Rights

Unfortunately, “[c]ases where devolution of authority goes hand in hand with recognition of local ownership . . . are still not widespread.”¹⁶⁴ The issue of property rights is “perhaps the most contentious in community management of natural resources.”¹⁶⁵ Barriers that hinder attempts to grant conservancies sufficient property rights are similar to the barriers conservancies face in obtaining more managerial authority. However, resistance to greater property rights is often stronger. For central governments, vesting property rights in conservancies is a larger loss of authority over natural resources than devolving management authority alone. Even if managerial authority is delegated to communities, retaining key property rights can be an important final check on conservancies’ decisions and use of natural resources.

The idea that wildlife is a resource belonging to the nation as a whole clearly cuts against the argument that conservancies should hold more complete property rights to land and wildlife. Instituting a gradual transition of property rights from the state to conservancies could neutralize the historical distrust of local communities that some authors¹⁶⁶ have argued motivates this idea. As conservancies demonstrate their ability to successfully develop and implement sustainable land and wildlife use plans, central governments could grant

163. Jones, *supra* note 2, at 17.

164. Shyamsundar et al., *supra* note 60, at 87.

165. *Id.* at 26.

166. See Barbier, *supra* note 129, at 103.

them fuller sets of property rights, which would encourage further conservancy investment in conservation.

Additionally, the bureaucratic impulse to hold onto power can be exacerbated when not just power, but the property rights to valuable land and wildlife, is at issue. One researcher observed that the opportunities for corruption that often develop when decision-makers have increased power and resources can be mitigated with improved decentralization that involves more accountability to individual conservancy members.¹⁶⁷ Thus, by creating a legal framework that strengthens and encourages community involvement and oversight, this bureaucratic impulse might be reduced.

Finally, central governments that view devolution of authority as politically threatening and potentially destabilizing are unlikely to increase conservancy and community authority by granting fuller property rights. Again, stable democratic governments are in the best position to lower this barrier. Additionally, governments could be tempted to give up property rights to conservancy land if they see financial benefit, in the form of taxes, from the development of tourism, commercial hunting, and other conservation industries that successful CBNRM programs could generate. Increased conservancy property rights may also lead to a significant savings for central governments by reducing the need for national-level conservation enforcement agencies and programs.

Overcoming these barriers is vital to ensuring the long-term success of CBNRM programs. Without clear and sufficient property rights over land and wildlife, there is a limit to the willingness of conservancies to make sacrifices to conserve wildlife and to invest in new conservation industries. By granting more complete property rights, the conservation incentives created by devolving management and decisionmaking authority will not be limited by government ownership of land and wildlife.

V. CONCLUSION

CBNRM is an innovative method of conservation aimed at reconciling the seemingly conflicting goals of wildlife preservation and economic development. These programs depend on creating a system of incentives that encourage and reward local communities for conserving and protecting wildlife. The philosophy of CBNRM has become increasingly popular over the last few decades as demonstrated by the variety of international organizations and agreements recognizing the

167. Shyamsundar et al., *supra* note 60, at 87–88.

rights of local people to own, control, and benefit from the natural resources surrounding them.

Zimbabwe's CAMPFIRE and the Namibian Conservancy Program have each attempted to create a system of incentives that promotes conservation and sustainable resource management. These programs have achieved some successes, especially in raising awareness of the importance of conservation and sustainable resource use. Still, each program lacks at least one of the two key features of the ideal CBNRM program framework: significantly delegated management and decisionmaking authority and sufficient and clear property rights over communal lands within conservancies.

Though not a perfect embodiment of the CBNRM philosophy, the Namibian program has done a better job of devolving authority to the local level than CAMPFIRE. In Zimbabwe, local authorities are mostly responsible for the distribution of the program's revenue rather than actual management decisions. In contrast, Namibian conservancies are at least able to use some species without government permission or quotas and are able to make quota suggestions for larger trophy species. In regards to property rights, however, both programs lack sufficient conservancy rights over land and wildlife including full management rights, the right of exclusivity, and the right of alienation.

These features are vital to creating the incentive structure that is the heart of the CBNRM model of conservation. This Note has addressed some of the major barriers that hinder the implementation of the ideal CBNRM legal framework and offered suggestions that could help CBNRM programs and governments resolve these roadblocks. CAMPFIRE and the Namibian Conservancy Program demonstrate that these barriers, if allowed to stand, can greatly reduce the potential effectiveness of CBNRM programs.