

The Convention on Biological Diversity: An Affectation of Conservation Exposed by the Interoceanic Chinese-Backed Nicaraguan Canal

Rachael Waxler Ruiz*

I.	INTRODUCTION	455
II.	BACKGROUND	457
	<i>A. Nicaragua Interoceanic Canal History and Facts</i>	457
	<i>B. Purpose and Ecological Provisions of the Convention</i>	459
	<i>C. Potential Impacts to Ecology and Biodiversity in the Canal Path</i>	462
	<i>D. Provisions Pertaining to Rights and Obligations of Indigenous Peoples Under the Convention</i>	465
	<i>E. Potential Impacts to Indigenous Populations</i>	466
III.	OBSTACLES TO EFFECTIVE ENFORCEMENT AND PREVENTATIVE ACTION UNDER THE CONVENTION OF BIOLOGICAL DIVERSITY	469
	<i>A. Interoceanic Canal Law and State Sovereignty Protections</i>	469
	<i>B. Ambiguous Provisions</i>	471
	<i>C. Withdrawal and Weak Enforcement Provisions</i>	473
IV.	THE INTEROCEANIC CANAL: EXPOSING THE CONVENTION’S PROCLIVITY TO INADEQUACY	475
V.	POLICY SUGGESTIONS: A STRONGER CONVENTION FOR THE NEXT GENERATION	477
VI.	CONCLUSIONS.....	478

I. INTRODUCTION

In an increasingly globalized world, national activities that were previously considered private affairs are no longer immune from external

* © 2015 Rachael Waxler Ruiz. J.D. candidate 2016, Tulane University Law School; M.S. International Development candidate 2017, Tulane University Payson Center for International Development; B.A. 2009, Environmental Policy and International Relations, Tulane University. Ms. Ruiz would like to thank Professor Collin Crawford for providing invaluable guidance and support.

and international scrutiny. This new exposure has become especially apparent as nations around the world try to balance natural resource exploitation and preservation. For this reason, in 1988, the United Nations Environmental Program (UNEP) created a group to “explore the need for an international convention on biological diversity” due to the threat of “[s]pecies extinction caused by human activities,” and because “biological diversity is a global asset of tremendous value to present and future generations.”¹ The text for the Convention was agreed upon in May 1992 at the Nairobi Conference for the Adoption of the Agreed Text of the Convention on Biological Diversity.² On June 5, 1992, the Convention on Biological Diversity (Convention) was opened for signatures at the United Nations Conference on Environment and Development, commonly known as the Rio “Earth Summit,” and then entered into force on December 29, 1993, after receiving 168 signatures.³

Over two decades later, the proposed Chinese-sponsored Interoceanic Canal in Nicaragua (Canal) illustrates that increased attention and enforcement of the Convention is paramount. Due to the nature of the Canal project in its breadth, projected path, and geography, the Convention would seem to provide guidance as to the limitations and responsibilities of the countries involved, especially in light of the fact that both Nicaragua and China are parties to the Convention.⁴

An analysis of the potential devastation to delicate ecosystems, endangered species, and indigenous populations, due to the construction and maintenance of the Canal, reveals potential violations of the Convention requirements. Enforcement, however, may be difficult because of the Convention’s ambiguous terms, deference to state sovereignty, withdrawal allowances, and weak enforcement provisions. Action under the Convention is further hindered by changes in Nicaraguan legislation that grant full rights to the Chinese association Hong Kong Nicaragua Canal Development Investment Company (HKND) to use the land, water, and natural resources in any way necessary for the construction of the Canal and its subsidiary projects.⁵

1. *History of the Convention*, CONVENTION ON BIOLOGICAL DIVERSITY, <http://www.cbd.int/history/> (last visited Feb. 8, 2015).

2. *Id.*

3. *Id.*

4. Nicaragua and China signed the Convention on Biological Diversity in June of 1992. China ratified the Convention on January 5, 1993, and Nicaragua on November 20, 1995. *List of Parties*, CONVENTION ON BIOLOGICAL DIVERSITY, <http://www.cbd.int/information/parties.shtml> (last visited Jan. 29, 2015).

5. José Adán Silva, *Nicaragua’s New Canal Threatens Biggest Source of Water*, INTER PRESS SERVICE (Aug. 23, 2013), <http://www.ipsnews.net/2013/08/nicaraguas-new-canal-threatens-biggest-source-of-water/>; Ley No. 840, 14 June 2013, Ley Especial para el Desarrollo de

Thus, while the project may lead to numerous violations of the Convention, Nicaragua will likely not face any legal consequences.

The purpose of this Comment is to demonstrate the feebleness of the Convention by using the Interoceanic Nicaraguan Canal as a case study. The Comment begins with an examination of the relevant provisions of the Convention, followed by their direct applicability to the proposed project. Next, the Comment analyzes the limitations of the Convention both textually and in practice. Then, the Comment concludes that the Convention only scratches the surface of preservation and that its provisions lack the force needed to provide concrete means to prevent or punish parties for violations involving the extensive ecological damage from projects such as the Canal. Finally, the Comment will suggest means to strengthen the Convention to prevent further harm to areas like those in Nicaragua.

II. BACKGROUND

A. *Nicaragua Interoceanic Canal History and Facts*

Nicaragua is the second poorest country in the Western Hemisphere, after Haiti, and the poorest Spanish-speaking country in the world.⁶ Historically, Nicaragua has been sparsely populated and has relied heavily on agricultural exports, which may explain why many Nicaraguan officials are depending on the Canal to propel the country out of poverty.⁷ In 1914, Nicaragua signed the Bryan-Chamorro Treaty,⁸ which granted the United States exclusive rights to build a canal in Nicaragua.⁹ The agreement had the effect of prohibiting a Nicaraguan

Infraestructura y Transporte Nicaragüense Atingente a El Canal, Zonas de Libre Comercio e Infraestructuras Asociadas [Special Law for the Development of Nicaraguan Infrastructure and Transportation Regarding the Free Trade Zones and Associated Infrastructure in the Canal Zone] art. 3, LA GACETA, DIARIO OFICIAL [L.G.], 14 June 2013 (Nicar.).

6. NELL FARRELL, *NICARAGUA BEFORE NOW: FACTORY WORK, FARMING, AND FISHING IN A LOW-WAGE GLOBAL ECONOMY* 8 (2010).

7. *Id.* at 11. Nicaragua's Vice President, Omar Halleslevens, claims, "With this great canal, Nicaragua expects to move 5% of the world's commerce that moves by sea, which will bring great economic benefits and double the GDP." *Nicaragua Launches Construction of Inter-Oceanic Canal*, BBC NEWS (Dec. 23, 2014, 1:15 AM), <http://www.bbc.com/news/world-latin-america-30584559>.

8. FARRELL, *supra* note 6, at 8-9 (discussing Bryan-Chamorro Convention, U.S.-Nicar., Aug. 5, 1914, EBSCOHost 21213070); Robert Freeman Smith, *A Note on the Bryan-Chamorro Treaty and German Interest in a Nicaraguan Canal*, 9 CARIBBEAN STUD. 63, 63 (1969) (discussing Bryan-Chamorro Convention, *supra*).

9. Jon Lee Anderson, *Breaking Ground on the Nicaragua Canal*, NEW YORKER (Jan. 2, 2015), <http://www.newyorker.com/news/news-desk/breaking-ground-nicaragua-canal?intcid=mod-latest> (discussing Bryan-Chamorro Convention, *supra* note 8).

canal that could compete with the Panama Canal.¹⁰ Nicaragua has since been nursing this wound, only inciting the desire to one day have an interoceanic canal of its own. It seems that day has come, but the world is a different place than it was a century ago. While the potential economic gain is appealing,¹¹ the practicability and long-term value of such a grand project must be considered in the context of globalization, incorporating global issues, such as environmental instability and the international movement towards universal human rights.

In June 2013, Nicaragua enacted legislation that granted HKND, a Chinese company led by Chinese telecommunications billionaire Wang Jing,¹² the right to construct a canal through southern Nicaragua.¹³ HKND will have the right to use and operate the Canal for the next fifty years, subject to a fifty-year renewal.¹⁴ HKND will pay Nicaragua \$10 million annually for ten years and then a gradually increasing share of Canal revenues, beginning at a mere 1%.¹⁵ After fifty years, Nicaragua will be a majority shareholder.¹⁶ The proposed Canal will be three times the length of the Panama Canal and located only about 550 miles north.¹⁷ The proposed path runs from Punta Gorda on the Caribbean Coast to the Brito River on the Pacific side and continues through forests, biological reserves, wetlands, and autonomous regions.¹⁸ The approximately 178-

10. *Id.* (discussing Bryan-Chamorro Convention, *supra* note 8).

11. *Nicaragua Launches Construction of Inter-Oceanic Canal*, *supra* note 7.

12. Ishaan Tharoor, *Why the Chinese-Backed Nicaragua Canal May Be a Disaster*, WASH. POST (Dec. 23, 2014), <http://www.washingtonpost.com/blogs/worldviews/wp/2014/12/23/why-the-chinese-backed-nicaragua-canal-may-be-a-disaster/>.

13. Rachel Nuwer, *Nicaragua Plans To Bisect the Country with a Massive Canal*, SMITHSONIAN (Feb. 20, 2014), <http://www.smithsonianmag.com/science-nature/Nicaragua-plans-bisect-country-massive-canal-180949838/?no-ist>; Carrie Kahn, *Morning Edition: A Chinese Man, a \$50 Billion Plan and a Canal To Reshape Nicaragua*, NPR (Aug. 14, 2014, 10:35 PM), <http://www.npr.org/blogs/parallels/2014/08/14/340402716/nicaragua-banks-on-its-own-canal-to-boost-economy>; *see also* Ley No. 840, 14 June 2013, Ley Especial para el Desarrollo de Infraestructura y Transporte Nicaragüense Atingente a El Canal, Zonas de Libre Comercio e Infraestructuras Asociadas [Special Law for the Development of the Nicaraguan Infrastructure & Transportation Regarding the Free Trade Zones & Associated Infrastructure in the Canal Zone], LA GACETA, DIARIO OFICIAL [L.G.] 14 June 2013 (Nicar.).

14. Nuwer, *supra* note 13; Axel Meyer & Jorge A. Huete-Pérez, *Conservation: Nicaragua Canal Could Wreak Environmental Ruin*, NATURE (Feb. 19, 2014), <http://www.nature.com/news/conservation-nicaragua-canal-could-wreak-environmental-ruin-1.14721>.

15. Brianna Lee, *Nicaragua's Canal Project Pushes Forward Despite Economic, Environmental Questions*, INT'L BUS. TIMES (Aug. 15, 2014, 2:47 PM), <http://www.ibtimes.com/nicaraguas-canal-project-pushes-forward-despite-economic-environmental-questions-1655176>.

16. *See* Jonathan Watts, *Land of Opportunity—and Fear—Along Route of Nicaragua's Giant New Canal*, GUARDIAN (Jan 20, 2015, 8:07 AM), <http://www.theguardian.com/world/2015/jan/20/-sp-nicaragua-canal-land-opportunity-fear-route>.

17. Nuwer, *supra* note 13.

18. Meyer & Huete-Pérez, *supra* note 14; Brian Clark Howard, *Nicaraguan Canal Could Wreck Environment, Scientists Say*, NAT'L GEOGRAPHIC (Feb. 20, 2014), <http://news.nationalgeo>

mile path will cut through Lake Nicaragua, the largest freshwater lake in Central America.¹⁹ Out of multiple options, this route was approved on July 7, 2014, with projected costs estimated at \$50 billion.²⁰ The project broke ground on December 22, 2014, with the construction of the first access road.²¹ In addition to the Canal itself, the project plans include subprojects such as ports, free-trade zones, tourist complexes, an international airport, access roads, and a multipurpose manufacturing complex.²²

B. Purpose and Ecological Provisions of the Convention

A large majority of diverse plant and animal species live in tropical areas, especially in rainforests and marine ecosystems, most of which are located within the borders of developing countries.²³ The Convention “is the main international instrument addressing biodiversity issues.”²⁴ Accordingly, international preservation initiatives are essential for two key reasons.²⁵ First, many species’ migration patterns cross through multiple state territories.²⁶ Preservation efforts of one state are rendered meaningless if the same animals are destroyed in another.²⁷ Second, no state wants to be at a comparable economic disadvantage.²⁸ Consequently,

graphic.com/news/2014/02/140220-nicaraguan-canal-environment-conservation/; Lee, *supra* note 15.

19. Howard, *supra* note 18; Watts, *supra* note 16.

20. Lee, *supra* note 15; Christopher Cruz, *A Grand Undertaking*, HARV. POL. REV. (Jan. 25, 2015, 7:11 PM), <http://harvardpolitics.com/world/grand-undertaking/>.

21. *Nicaragua’s Canal Digging for Truth*, ECONOMIST (Dec. 20, 2014), <http://www.economist.com/node/21636794>; *Nicaragua Breaks Ground on Historic Canal Project*, USA TODAY (Dec. 23, 2014, 12:57 AM), <http://www.usatoday.com/story/news/world/2014/12/23/nicaragua-breaks-ground-on-historic-canal-project/20796913/>.

22. Ivan Castano, *Sides Spar over Environmental Impact of Nicaragua Canal To Connect Atlantic, Pacific*, BLOOMBERG L. (Oct. 22, 2014), <https://www.bloomberglaw.com/document/X4R4B128000000?campaign=bnaemailink&issue=20141008&jcsearch=bna%2520a0f6w4e1e8&js=0&sitename=bna&subscriptiontype=bnainer#jcite> (subscription required).

23. R. Jayakumar Nayar & David Mohan Ong, *Developing Countries, ‘Development’ and the Conservation of Biological Diversity*, in INTERNATIONAL LAW AND THE CONSERVATION OF BIOLOGICAL DIVERSITY 235 (Michael Bowman & Catherine Redgwell eds., 1996).

24. Chiara Ragni, *Procedures and Mechanisms on Compliance Under the 2000 Cartagena Protocol on Biosafety to the 1992 Convention on Biological Diversity*, in NON-COMPLIANCE PROCEDURES AND MECHANISMS AND THE EFFECTIVENESS OF INTERNATIONAL ENVIRONMENTAL AGREEMENTS 101 (Tullio Treves et al. eds., 2009) (discussing Convention on Biological Diversity, June 1992, 1760 U.N.T.S. 79).

25. Robin Churchill, *The Contribution of Existing Agreements for the Conservation of Terrestrial Species and Habitats to the Maintenance of Biodiversity*, in INTERNATIONAL LAW AND THE CONSERVATION OF BIOLOGICAL DIVERSITY, *supra* note 23, at 72.

26. *Id.*

27. *Id.*

28. *Id.*

states, particularly developing states, are hesitant to take steps to preserve biodiversity unless pressured to do so through international agreements, financial incentives, and assurance that other states will take comparable steps.²⁹ Thus, international relations authorities should make a greater and more visible attempt to incorporate developing countries' viewpoints and policy considerations with agreements like the Convention playing a central role.³⁰

“[T]he Convention provides a comprehensive and binding set of rules aimed at granting the conservation of biological diversity on the one hand, and the sustainable use of natural resources and the fair and equitable sharing of benefits deriving from genetic resources on the other.”³¹ The stated objectives of the Convention include “the conservation of biological diversity, [and] the sustainable use of its components.”³² Biological diversity is defined as “variability among living organisms from all sources including, *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part: this includes diversity within species, between species and of ecosystems.”³³ Sustainable use is defined as “the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations.”³⁴ Further, the Convention mandates that states “[d]evelop or maintain necessary legislation and/or other regulatory provisions for the protection of threatened species and populations.”³⁵ Finally, it requires states to regulate activities that are determined to have a “significant adverse effect on biological diversity.”³⁶

The parties to the Convention are required to “[d]evelop national strategies, plans or programmes for the conservation and sustainable use of biological diversity or adapt for this purpose existing strategies,” and “[i]dentify processes and categories of activities which have or are likely to have significant adverse impacts on the conservation and sustainable use of biological diversity, and monitor their effects.”³⁷ Parties must

29. *Id.*

30. Nayar & Ong, *supra* note 23, at 235 (discussing Convention on Biological Diversity, *supra* note 24).

31. Ragni, *supra* note 24, at 101 (discussing Convention on Biological Diversity, *supra* note 24).

32. Convention on Biological Diversity, *supra* note 24, art. 1.

33. *Id.* art. 2.

34. *Id.*

35. *Id.* art. 8.

36. *Id.*

37. *Id.* arts. 6-7.

establish protected areas, manage biological resources, promote protection of ecosystems, natural habitats, and viable populations of species in natural surroundings, adopt measures to avoid or minimize adverse impacts on biological diversity, and integrate consideration of conservation of biological resources into national decision making.³⁸ Parties should also “[a]dopt measures for the recovery and rehabilitation of threatened species and for their reintroduction into their natural habitats under appropriate conditions.”³⁹

Additionally, various provisions of the Convention encourage public participation. It requires parties to perform an Environmental Impact Assessment (EIA) and minimize adverse impacts where proposed projects are likely to have “significant adverse effects on biological diversity.”⁴⁰ The public should have access to all available information and participate in assessing and minimizing damaging effects.⁴¹ The Conference of Parties oversees the execution of the Convention and “advances implementation of the Convention through the decisions it takes at its periodic meetings” that currently take place every two years.⁴² The most recent meeting was in October 2014.⁴³ Its role is to “examine, on the basis of studies to be carried out, the issue of liability and redress, including restoration and compensation, for damage to biological diversity, except where such liability is a purely internal matter.”⁴⁴

Though the Convention is an international treaty that “sets overall goals and policies and general obligations,” the task of reaching those goals rests primarily with the individual countries.⁴⁵ The hope is that national governments will regulate natural resource use and protect biodiversity, especially in sectors such as forestry and urban planning.⁴⁶ States, however, have the “sovereign right to exploit their own resources pursuant to their own environmental policies” and are generally limited only by impacts that their activities may have on neighboring states.⁴⁷ Special consideration is given, however, to developing countries that are

38. *Id.* art. 8.

39. *Id.* art. 9.

40. *Id.* art. 14.

41. *Id.* arts. 14, 17.

42. *Conference of the Parties*, CONVENTION ON BIOLOGICAL DIVERSITY, <http://www.cbd.int/cop/> (last visited Feb. 8, 2015).

43. *Id.*

44. Convention on Biological Diversity, *supra* note 24, art. 14.

45. *Sustaining Life on Earth*, CONVENTION ON BIOLOGICAL DIVERSITY, <http://www.cbd.int/convention/guide/default.shtml?id=nataction> (last visited Feb. 8, 2015).

46. *Id.*

47. Convention on Biological Diversity, *supra* note 24, art. 3.

most environmentally vulnerable, “such as those with arid and semi-arid zones, coastal and mountainous areas.”⁴⁸

Finally, it must be noted that the Convention makes a special concession for developing countries to preference economic growth over conservation.⁴⁹ For developing countries, “economic and social development and eradication of poverty are the first and overriding priorities.”⁵⁰ This special provision may have been added to ease developing countries’ fear that their growth and development would be hindered by developed nations’ imperialism.⁵¹ At the same time, it opens the doors for degradation in a majority of the world’s most delicate and diverse ecosystems.

C. *Potential Impacts to Ecology and Biodiversity in the Canal Path*

The Global Diversity Strategy, “produced by UNEP, the World Conservation Union and World Resources Institute,” identified “population growth, increasing consumption of resources, ignorance about species and ecosystems, poorly conceived government policies, and economic causes such as the effects of global trading systems, inequity in resource distribution and the failure of economic systems to account for the value of biological resources” as the main factors that lead to decreased biodiversity.⁵² The Convention, as it is written today, fails to take into account these realities. The Nicaraguan Canal project is a perfect example of poorly conceived government policies and a failure of economic systems to account for the value of biological resources. The government is blinded by the century-old dream of a canal and its alleged potential to launch Nicaragua out of poverty.⁵³ Nicaragua is sacrificing long-term diversity, and even potential profits from those resources, for a short-term pledge of economic transformation.⁵⁴ By moving forward with the project, Nicaragua will expose the weakness of the Convention’s mandates that require countries to protect endangered species and unique ecosystems.

48. *Id.* art. 20.

49. *Id.* pmb1.

50. *Id.* art. 20.

51. Nayar & Ong, *supra* note 23, at 236.

52. Churchill, *supra* note 25, at 72 (citing WORLD RES. INST., *Wildlife and Habitat, in* WORLD RESOURCES 1992-93, at 134-36 (1992)).

53. *Nicaragua’s Canal Digging for Truth*, *supra* note 21; Watts, *supra* note 16.

54. See Luis Manuel Galeano & Didi Tang, *Rising Anger as Nicaragua Canal To Break Ground*, N.Y. TIMES (Dec. 21, 2014, 9:34 AM), http://www.nytimes.com/aponline/2014/12/21/world/americas/ap-lt-nicaragua-canal-fight.html?_r=0; see also *Nicaragua’s Canal Digging for Truth*, *supra* note 21.

Nicaraguan scientists argue that the Canal is a bad idea for many reasons.⁵⁵ First, the Canal will have major impacts on Nicaragua's delicate freshwater systems. The proposed route cuts through 65 miles of freshwater Lake Nicaragua.⁵⁶ Lake Nicaragua spans 3,000 square miles and serves as a freshwater drinking water source for many Nicaraguans.⁵⁷ Dredging the lake will create tons of sediment that could suffocate many fish and other life forms in Lake Nicaragua and downstream.⁵⁸ Additionally, the Canal project proposes to connect Lake Nicaragua with two oceans that could transform "a free-flowing freshwater ecosystem into an artificial slack-water reservoir combined with salt water."⁵⁹ Furthermore, once the Canal is in operation, saltwater from the adjacent oceans infiltrating into the Canal's lock system could result in the salinization of the lake and surrounding freshwater ecosystems.⁶⁰ The newly created brackish water would then wipe out "native lake animals such as bull sharks, sawfish, cichlids and tarpon."⁶¹ Additionally, industrial pollution from construction and transport could dump diesel and other waste products into the water.⁶² Moreover, many invasive species could make their way into the Canal as stowaways on the ships, which could affect the native animals, flora, and fauna in the freshwater systems.⁶³ Finally, the proposed route will hug the ecologically diverse and volcanic island of Ometepe.⁶⁴ Ometepe is a designated UNESCO biosphere reserve composed of two active volcanoes situated in the middle of Lake Nicaragua.⁶⁵ The island hosts five different ecosystems that include "the most biodiverse tropical dry forest" in Nicaragua.⁶⁶ Over 30,000 people live on the island, and in recent years, it has become a popular ecotourism destination.⁶⁷

55. See Galeano & Tang, *supra* note 54; see also Meyer & Huete-Pérez, *supra* note 14.

56. Lee, *supra* note 15.

57. Tracy Wilkinson, *Secrecy and Doubt Shroud Nicaragua's Huge Canal Plans*, L.A. TIMES (Sept. 9, 2014, 3:00 AM), <http://www.latimes.com/world/great-reads/la-fg-c1-nicaragua-canal-20140909-story.html#page=1>.

58. *All Things Considered: Scientists Fear Ecological Disaster in Nicaragua's Planned Canal*, NAT'L PUB. RADIO (Feb. 20, 2014, 4:00 PM), <http://www.npr.org/2014/02/20/279710270/scientists-fear-ecological-disaster-in-nicaraguas-planned-canal>.

59. Meyer & Huete-Pérez, *supra* note 14.

60. Nuwer, *supra* note 13.

61. *Id.*

62. Howard, *supra* note 18.

63. Nuwer, *supra* note 13.

64. Howard, *supra* note 18.

65. *UNESCO Announces Selection of 13 New Biosphere Reserves*, UNESCO (Feb. 2, 2010), http://www.unesco.org/new/en/media-services/single-view/news/unesco_announces_selection_of_13_new_biosphere_reserves/#.VMaLhEu5fwI.

66. Watts, *supra* note 16.

67. *UNESCO Announces Selection of 13 New Biosphere Reserves*, *supra* note 65.

Second, the impact of the Canal will likely extend beyond the proposed Canal path and into surrounding “fragile, pristine and scientifically important marine, terrestrial and lacustrine ecosystems.”⁶⁸ It is reported that the Canal could destroy nearly one million acres of rainforest and wetlands,⁶⁹ and as already noted, the dredging of Lake Nicaragua would create sedimentation that will adversely impact the nearby wetlands.⁷⁰ The importance of the neighboring San Miguelitos wetlands is internationally recognized under the Ramsar Convention on Wetlands of International Importance.⁷¹ There are over a dozen animals from the Red List of Threatened Species of the International Union for Conservation of Nature (IUCN) that could be greatly diminished or wiped out.⁷² Of the seven protected areas in the Southeast Biosphere Reserve of Nicaragua, the Canal will affect three: the Cerro Silva Nature Reserve, the Punta Gorda Nature Reserve, and the Indio Maiz Biological Reserve.⁷³

Specifically, endangered species such as spider monkeys, jaguars, Baird’s tapirs, and harpy eagles live in the Bosawas Biosphere Reserve directly north of the Canal route and in the Indio Maiz Biological Reserve to the south.⁷⁴ Together these reserves constitute almost 2.5 million hectares of tropical forests.⁷⁵ Additionally, there are plans to dredge straight through the northern part of the Cerro Silva Nature Reserve, home to the oldest oak trees in Central America, various species of monkeys, and the colorful quetzal birds.⁷⁶ The Canal will divide these protected areas in two, which could seriously impact “migration patterns, connectivity and ecological dynamics.”⁷⁷ Moreover, the adverse environmental impacts are not limited to the Canal path. There are also proposed plans to drain or fill neighboring wetlands for international

68. Meyer & Huete-Pérez, *supra* note 14.

69. Nuwer, *supra* note 13.

70. *All Things Considered: Scientists Fear Ecological Disaster in Nicaragua’s Planned Canal*, *supra* note 58.

71. Watts, *supra* note 16 (discussing Ramsar Convention on Wetlands of International Importance Especially as Waterfowl Habitat, Feb. 2, 1971, 996 U.N.T.S. 245). The Ramsar Convention is an international agreement dedicated to the protection of wetlands. Nicaragua joined the Ramsar Convention on November 30, 1997. *Country Profiles*, RAMSAR.ORG, <http://www.ramsar.org/country-profiles> (last visited Feb. 18, 2015).

72. Darrell Bushnell, *Environmental Impact of Proposed Canal*, NICAR. COMMUNITY BLOG (July 20, 2014), <http://www.nicaragua-community.com/environmental-impact-proposed-canal/>.

73. *Id.*

74. Nuwer, *supra* note 13.

75. Meyer & Huete-Pérez, *supra* note 14.

76. Nuwer, *supra* note 13.

77. Meyer & Huete-Pérez, *supra* note 14.

airports and industrial zones.⁷⁸ Despite the designation of “protected area” or “reserve,” many of these special areas will be destroyed or severely impacted through the various stages of project.

Finally, the Canal project will alter Nicaragua’s Atlantic and Pacific coastlines. Coastal areas, such as the Brito River, are some of the most diverse and important ecosystems in the world in terms of food and breeding grounds for different species, and in terms of potential medical and chemical resources.⁷⁹ The beach and estuary of the Brito River on the Pacific coast of Nicaragua is a nesting area for endangered sea turtles.⁸⁰ The Canal project could destroy coral reefs and mangroves,⁸¹ which are some of the world’s most unique and diverse habitats. Construction will likely include plans to “bulldoze over endangered sea turtle nesting beaches on both the Atlantic and Pacific coasts” to make way for new ports.⁸² The Pacific bay is also a host to whales and dolphins that would likely be affected by the project.⁸³ Aquatic biospheres are only mentioned twice in the entire text of the Convention (in articles 2 and 22),⁸⁴ indicating a “terrestrial bias”⁸⁵ and exposing yet another frailty in the Convention’s protective measures.

D. Provisions Pertaining to Rights and Obligations of Indigenous Peoples Under the Convention

The Convention not only encourages the protection of biodiversity, but also endorses its most valuable caretakers. The Convention mandates that national governments shall, through their national legislation, “respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity.”⁸⁶ The parties are encouraged to “[s]upport local populations to develop and implement remedial action in degraded areas where biological diversity has been reduced” and “[e]ncourage cooperation between its governmental authorities and its private sector in developing methods for

78. Howard, *supra* note 18.

79. David Freestone, *The Conservation of Marine Ecosystems Under International Law, in INTERNATIONAL LAW AND THE CONSERVATION OF BIOLOGICAL DIVERSITY*, *supra* note 23, at 93.

94. Realizing the “benefits arising out of the utilization of genetic resources” is one of the expressed objectives of the Convention. Convention on Biological Diversity, *supra* note 24, art. 1.

80. Bushnell, *supra* note 72; Nuwer, *supra* note 13.

81. Nuwer, *supra* note 13.

82. *Id.*

83. Bushnell, *supra* note 72.

84. Convention on Biological Diversity, *supra* note 24, arts. 2, 22.

85. Freestone, *supra* note 79, at 91.

86. Convention on Biological Diversity, *supra* note 24, art. 8.

sustainable use of biological resources.”⁸⁷ It is notable that “the Convention uses the term ‘indigenous and local communities’ rather than indigenous people.”⁸⁸ By including local communities, the Convention expands the net to include local farmers and families who have lived on the land for generations. While paragraph one of article 8 is revolutionary in that it grants value to indigenous people and their knowledge of biological diversity and sustainability, in reality, the provision does little more than “restate the already familiar agenda of issues concerning indigenous people.”⁸⁹ Like many provisions in the Convention, the article seems like a positive policy initiative on its face, while in practice it is too ambiguous to be effective.

Additionally, the Convention encourages transparency and public participation when feasible. It requires parties to identify activities that will have “significant adverse impacts on the conservation and sustainable use of biological diversity,” “[i]ntroduce appropriate procedures requiring environmental impact assessment of its proposed projects that are likely to have significant adverse effects,” and “where appropriate, allow for public participation in such procedures.”⁹⁰

E. Potential Impacts to Indigenous Populations

The current Canal route would displace up to 30,000 Nicaraguan landowners, farmers, and indigenous people.⁹¹ HKND, as a result of changes in Nicaraguan legislation,⁹² will be able to “seize the autonomous territories of the black Creoles and indigenous Sumo and Rama Indians, which were granted to them by the Nicaraguan Constitution of 1987.”⁹³ Furthermore, the projected path cuts through the designated Autonomous Region, violating the 2003 legislation that recognized “the right of indigenous and Afro-descendant communities to communal property in their traditional lands,” including the Rama Krol

87. *Id.* art. 10.

88. John Woodliffe, *Biodiversity and Indigenous People*, in INTERNATIONAL LAW AND THE CONSERVATION OF BIOLOGICAL DIVERSITY, *supra* note 23, at 265 (quoting Convention on Biological Diversity, *supra* note 24, art. 8).

89. *Id.* at 266.

90. Convention on Biological Diversity, *supra* note 24, arts. 7, 14.

91. Anderson, *supra* note 9.

92. Silva, *supra* note 5; Ley No. 840, 14 June 2013, Ley Especial para el Desarrollo de Infraestructura y Transporte Nicaragüense Atingente a El Canal, Zonas de Libre Comercio e Infraestructuras Asociadas [Special Law for the Development of Nicaraguan Infrastructure and Transportation Regarding the Free Trade Zones and Associated Infrastructure in the Canal Zone] art. 3, LA GACETA, DIARIO OFICIAL [L.G.], 14 June 2013 (Nicar.).

93. Anderson, *supra* note 9.

territory that will be cut in two by the Canal.⁹⁴ Wang told Nicaraguans at the Canal's groundbreaking ceremony celebrating the construction of the first access road that "Nicaraguans whose land is expropriated would be compensated based on 'market principles,' with 'no tricks or lies.'"⁹⁵ HKND is expected to announce compensation packages in a few months.⁹⁶ There is no indication, however, of what "market principles" will be used to determine those packages. The lack of transparency during the planning, commencement, and negotiations of the project has caused growing concern both locally and internationally.⁹⁷ It is likely, therefore, that expropriation of property will likely be as forceful, unrelenting, and unfair as other aspects of the project. Fears of uncompensated expropriations, exasperated by a history of lack of transparency that Nicaraguans have come to know of the Nicaraguan government,⁹⁸ are evidenced by recent protests and demonstrations.⁹⁹

The relationship between indigenous people and the conservation of biodiversity in the areas in which they live are so intimately intertwined that the destruction of one invariably leads to the destruction of the other.¹⁰⁰ "[D]eforestation, new human settlements prompted by population growth, mining of mineral resources, logging, dam-building, cattle ranching and the use of homelands for carrying out weapons testing and siting military installations" all result in the removal of indigenous populations from their homeland.¹⁰¹ Thus, there is a clear pattern of disregard for the rights of local communities and those natural resources on which the people's livelihood and culture depend.¹⁰² Because the Convention aims to protect biodiversity at an international level by providing only "a legal framework for the sustainable exploitation of a resource,"¹⁰³ nations are left to form their own policies, priorities, and procedures often to the detriment of local populations such as those

94. Watts, *supra* note 16.

95. Anderson, *supra* note 9.

96. Watts, *supra* note 16.

97. Anderson, *supra* note 9.

98. See, e.g., *The Survivor*, ECONOMIST (Nov. 5, 2011), <http://www.economist.com/node/21536629> (describing events surrounding Nicaragua's 2008 election when current president Daniel Ortega illegally ran for a third consecutive term and defrauded the voting process to secure the win); see also *Nicaragua's Daniel Ortega Heads for Presidential Win*, BBC NEWS (Nov. 7, 2011), <http://www.bbc.com/news/world-latin-america-15610242>.

99. Gabriel Stargardter, *Doubts Deepen over Chinese-Backed Nicaragua Canal as Work Starts*, REUTERS (Dec. 26, 2014, 2:25 PM), <http://www.reuters.com/article/2014/12/26/us-nicaragua-canal-idUSKBN0K410620141226>.

100. Woodliffe, *supra* note 88, at 258.

101. *Id.*

102. Nayar & Ong, *supra* note 23, at 250.

103. *Id.* at 252; *Sustaining Life on Earth*, *supra* note 45.

living in the path of the Canal. Developing countries are not left with many options “for the preservation and protection of the social and cultural diversity which is present in local communities and which depends for its very survival on the ability of these local communities to continue with their own methods of species utilisation.”¹⁰⁴ Ignoring the impact on indigenous populations has been called “maldevelopment,” where nature is valued only for its immediate financial potential for human use, while ignoring the more complex systems of which man is a member.¹⁰⁵ The Canal is a perfect example of how the Convention allows for maldevelopment. Nicaragua’s narrow economic focus ignores the complicated ecological and social systems that will be destroyed if the project continues. While the Convention discourages such behavior, it does little to prevent it.

Lack of transparency is a common complaint surrounding the Canal, both from local populations and from other nations.¹⁰⁶ Little information has been released to Nicaraguans and the world concerning major aspects of the project, such as funding, EIAs, and project details.¹⁰⁷ An accurate EIA would include both the direct and indirect environmental impacts of the Canal. A complete EIA analysis would include “[t]he effects of construction, major roadways, a coast-to-coast railway system and oil pipeline, neighboring industrial free-trade zones, and two international airports [that would] transform wetlands into dry zones, remove hardwood forests, and destroy the habitats of animals including those of the coastal, air, land, and freshwater zones.”¹⁰⁸ Nicaragua made no plans to perform an EIA, but rather left the responsibility to HKND, and did not require the company to share the results with the Nicaraguan public.¹⁰⁹ A group of national scientists wrote a letter to the President, demanding to see the studies performed by HKND, but were denied.¹¹⁰ In fact, HKND contracted a British firm, Environmental Research Management (ERM), to perform an Environmental and Social Impact Assessment (ESIA) that will be released in April of 2015, four months after the project broke ground.¹¹¹ Further, while HKND claims that they

104. Nayar & Ong, *supra* note 23, at 252.

105. *Id.* at 253.

106. Ivan Castro, *U.S. Embassy in Nicaragua Voices Concerns over Chinese-Led Canal*, REUTERS (Jan. 7, 2015, 4:01 AM), <http://www.reuters.com/article/2015/01/07/us-nicaragua-canal-idUSKBN0KG01L20150107/>.

107. *Id.*

108. Howard, *supra* note 18.

109. Meyer & Huete-Pérez, *supra* note 14.

110. Khan, *supra* note 13.

111. *Nicaragua Canal Development Project Environmental and Social Impact Assessment*, HKND GROUP, <http://hknd-group.com/portal.php?mod=view&aid=86> (last visited Feb. 2, 2015);

are encouraging public participation through community meetings, local populations complain that the meetings are more didactic than participatory.¹¹²

In light of the intimate link between indigenous populations and biodiversity conservation, it is likely that the Canal would wreak havoc on both. The Canal will not only displace tens-of-thousands of people, but it will also destroy their culture and their way of life, something that is not compensable in the paltry market value of their land. A village leader expressed his fear that the Canal “will destroy the nature that [they] are as much a part of as the trees that grow [t]here” and that the Nicaraguan government will continue to discriminate against and disregard the rights of the indigenous people for a project that does not benefit them.¹¹³ Further, by removing people from these areas, the project will not only demolish land, but also displace its greatest caretakers. The Canal will likely have long-term devastating effects on Nicaragua’s precious ecosystems and indigenous cultures, ones that Nicaragua through the Convention promised to protect.

III. OBSTACLES TO EFFECTIVE ENFORCEMENT AND PREVENTATIVE ACTION UNDER THE CONVENTION OF BIOLOGICAL DIVERSITY

A. *Interoceanic Canal Law and State Sovereignty Protections*

Almost all biodiversity resides within the territorial control of sovereign states, and therefore its management is left to those states rather than international regulation.¹¹⁴ Especially in developing countries, where there exists an “almost unprecedented ‘say’ in the legal construction of the system for their exploitation . . . these countries are keen to exert the maximum amount of leverage from this fact.”¹¹⁵ For example, in the summer of 2013, Nicaragua passed Ley 840, “Ley Especial para el Desarrollo de Infraestructura y Transporte Nicaragüense Atingente a El Canal, Zonas de Libre Comercio e Infraestructuras Asociadas,” translated as “Special Law for the Development of Nicaraguan Infrastructure and Transportation Regarding the Free Trade

Lucas Laursen, *Nicaragua Defies Canal Protests*, NATURE (Dec. 27, 2014), <http://www.nature.com/news/nicaragua-defies-canal-protests-1.16623>.

112. Galeano & Tang, *supra* note 54.

113. Watts, *supra* note 16.

114. Sam Johnston, *Sustainability, Biodiversity and International Law*, in INTERNATIONAL LAW AND THE CONSERVATION OF BIOLOGICAL DIVERSITY, *supra* note 23, at 59; *Sustaining Life on Earth*, *supra* note 45.

115. Nayar & Ong, *supra* note 23, at 237.

Zone and Associated Infrastructure in the Canal Zone” (Canal Law).¹¹⁶ Through this law, Nicaragua repealed existing laws that protected natural resources and bodies of water and relinquished its right to sue investors of HKND in Nicaraguan or international courts for any damage caused to the environment during studies, construction, or operation of the Canal and its subsidiary projects.¹¹⁷ The Nicaraguan “concession allows HKND to make use of any natural resources and to declare any national territory to be necessary for the purpose of the project” only exacerbates the potential negative impacts.¹¹⁸ Specifically, the Canal Law “grants HKND the right to expropriate land and natural resources as it sees fit for the success of the project and subprojects.”¹¹⁹ The Canal project demonstrates that economic and policy choices incentivize land conversion and clearance resulting in deforestation and wetland loss.¹²⁰ While the Convention provides some, though minimal, protection for these delicate areas, hope for actual preservation was abolished when Nicaragua enacted the law that supplanted what little safeguards existed under national and international law.¹²¹ Under the current structure states are encouraged but not incentivized to conserve.¹²²

The Canal Law nullifies Nicaraguan property rights by taking land from nationals and granting control of that land to a foreign corporation. People along the proposed Canal route are afraid of losing their land without just compensation.¹²³ If the Canal was a purely Nicaraguan project, then the government could justify the takings as a sacrifice for a greater national good. These expropriations are especially terrifying because the land is not being taken by the government for a greater social benefit, but rather by a foreign corporation. If the project moves forward as planned, Nicaraguans could lose their land, Nicaragua could lose its land caretakers, and the sustainable use of those lands will likely be diminished along with those rights.

Localizing responsibility through the enforcement of property rights could be a positive step in encouraging preservation under the

116. Silva, *supra* note 5; Ley No. 840, 14 June 2013, Ley Especial para el Desarrollo de Infraestructura y Transporte Nicaragüense Atingente a El Canal, Zonas de Libre Comercio e Infraestructuras Asociadas [Special Law for the Development of Nicaraguan Infrastructure and Transportation Regarding the Free Trade Zones and Associated Infrastructure in the Canal Zone], LA GACETA, DIARIO OFICIAL [L.G.], 14 June 2013 (Nicar.).

117. Silva, *supra* note 5.

118. Howard, *supra* note 18.

119. *Id.*; Ley No. 840, art. 3.

120. Johnston, *supra* note 114, at 69.

121. Ley No. 840, art. 5.

122. Johnston, *supra* note 114, at 59-60.

123. Galeano & Tang, *supra* note 54.

Convention. Granting, respecting, and enforcing property rights are important tools in the maintenance of biodiversity conservation because they concentrate accountability and reach targeted areas that the Convention does not specifically regulate.¹²⁴ Currently, the Convention, by leaving biodiversity protection to the state, effectively negates its own provisions regarding indigenous people's rights to preserve their land.¹²⁵ Property rights must be excludable, "exclusive, transferable, [and] secure."¹²⁶ They must also be "conferred for a sufficiently long time period"¹²⁷ and extend to the resources contained therein and their use. "A key aspect to implementing the principle is the creation of some form of internationally recognized property right in the components of biodiversity" that would be balanced with the Convention's respect for countries' sovereign rights over the maintenance and use of their biodiversity and natural resources as described in article 3.¹²⁸ Therefore, a real solution would entail an actual evaluative look and a balancing of economic interests with indigenous people's land rights in conservation efforts and enforcing them through a stronger version of the Convention.

B. Ambiguous Provisions

One of the most limiting aspects of the Convention is its broad, ambiguous language, particularly in regard to key terms such as "sustainable use" from article 2.¹²⁹ Thus, a major interpretive issue lies in the fact that 'sustainable use' of biodiversity "is rather enigmatic, with no one accepted meaning."¹³⁰ Historically, the term referred to regulatory prohibitions such as hunting seasons.¹³¹ Today, however the concept has a wide range of uses such as a duty to preserve diversity for biological reasons, a commitment to prevent a long term decline of resources, a responsibility to focus policies on principles such as the precautionary

124. Johnston, *supra* note 114, at 60.

125. Woodliffe, *supra* note 88, at 267.

126. Johnston, *supra* note 114, at 60.

127. *Id.*

128. *Id.* at 62. Article 3 grants to states "the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction." Convention on Biological Diversity, *supra* note 24, art. 3.

129. Sustainable use is defined as "the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations." Convention on Biological Diversity, *supra* note 24, art. 2.

130. Johnston, *supra* note 114, at 53.

131. *Id.* at 51-52.

principal and intergenerational equality, or an obligation to recognize the inherent importance of ecosystems as a whole.¹³² Sustainable use manifests itself in the Convention through the provisions mandating EIAs, research and information sharing, and public participation.¹³³ Thus, sustainable use depends on good governance, policymaking, and transparency,¹³⁴ things that the Canal project lacks entirely. The Convention recognizes the need to provide a legal framework for the sustainable exploitation of resources, but gives no guidelines to follow in practice.¹³⁵

Inconsistent use of the terms within the text of the Convention only exacerbates the ambiguity.¹³⁶ For example, “[i]n some places, it speaks of the ‘conservation and sustainable use of biodiversity,’”¹³⁷ while in others the Convention mentions “‘conservation of biological diversity and the sustainable use of its components,’”¹³⁸ and, finally, in others “the sustainable use of biological resources.”¹³⁹ The Convention thus leaves open for interpretation the relationship and synonymy of “conservation” and “sustainable use.”¹⁴⁰ Further, “[t]he Convention, rather than conferring sovereign rights over a country’s ‘biological diversity,’ confers these rights over a country’s ‘natural resources’; a term not defined in the Convention, nor for that matter in any of the other UNCED documents.”¹⁴¹ These inconsistencies imply a lack of comprehensibility on the part of the drafters to define the scope of the Convention in a useful and meaningful way.¹⁴²

This lack of clarity creates more questions of interpretation than it answers for national policymakers when tasked with determining whether the Convention promotes the management of natural resource exploitation for economic development or whether the ultimate goal is global conservation.¹⁴³ For the Canal project, it is unclear whether complete destruction for a tertiary purpose falls within the bounds of exploitation of natural resources for economic development or whether a

132. *Id.* at 52.

133. *Id.* at 56.

134. *Id.*

135. Nayar & Ong, *supra* note 23, at 252.

136. Johnston, *supra* note 114, at 56.

137. *Id.* (quoting Convention on Biological Diversity, *supra* note 24, art. 13).

138. *Id.* (quoting Convention on Biological Diversity, *supra* note 24, pmb., arts. 1-2).

139. *Id.* (quoting Convention on Biological Diversity, *supra* note 24, art. 10).

140. Johnston, *supra* note 114, at 56.

141. *Id.* at 65.

142. *See id.* at 56.

143. Nayar & Ong, *supra* note 23, at 244.

higher duty exists to protect biodiversity. Under the shadow of these ambiguities, the Canal can move forward with little resistance.

Other important concepts are not directly mentioned in the text of the Convention, but rather merely implied. They include “intergenerational equity, the precautionary approach, a biological basis for management and ecosystem management.”¹⁴⁴ The absence of these specific concepts may speak louder than their tacit presence.¹⁴⁵ This absence implies that these concepts do not have to be considered in conjunction with biodiversity conservation. The broad and unspecific mandates for protective measures preference economic benefits of conservation, rather than inherent or potential values of conservation itself. While the Convention provides that parties adopt appropriate measures to preserve biodiversity, it gives no actual instruction.¹⁴⁶ Each party is merely mandated, without enforcement mechanisms, to adopt “appropriate measures” as it defines them to meet its particular goals. There are no benchmarks, specific tools, minimum standards of preservation, or concrete enforcement mechanisms. Therefore it is possible that Nicaragua may be applauded for conservation in some areas, while simultaneously facing no repercussions for the irreparable damage it does in others.

C. *Withdrawal and Weak Enforcement Provisions*

Generally, “[e]ven within the context of framework conventions, the normative content of the obligations are relatively weak and most of its provisions are little more than purely exhortatory.”¹⁴⁷ The Convention is no exception. “[T]he Convention lacks the necessary detail to be capable of effecting specific activities or even in some respect providing any guidance.”¹⁴⁸ The Convention’s only oversight body is the Conference of Parties (Conference), which is “entrusted with the task to review the implementation of the Convention.”¹⁴⁹ The Conference meets every two years, unless there is a need for an extraordinary meeting.¹⁵⁰ Article 23 establishes the functions and the tasks of the Conference, yet it fails to establish a protocol to deal with violations of the Convention when they occur. While the Conference establishes “protected areas” and monitors

144. Johnston, *supra* note 114, at 55.

145. *See id.*

146. *See id.* at 62.

147. *Id.* at 54.

148. *Id.* at 54-55.

149. Ragni, *supra* note 24, at 101; Convention on Biological Diversity, *supra* note 24, art. 23.

150. *Conference of the Parties*, *supra* note 42.

country conservation plans, it does little in terms of actual enforcement.¹⁵¹

For example, in Nicaragua's 2014 National Report on Biodiversity, the Ministry of the Environment and Natural Resources listed seventy-four protected areas, including those in the Canal Path.¹⁵² The Report points to Nicaraguan laws passed between 2010 and 2013 that support Convention initiatives including Ley 807, "Ley de Uso y Conservación de la Diversidad Biológica," translated as the Law of Use and Conservation of Biological Diversity.¹⁵³ This law was passed with the objectives of conservation and sustainable use of existing biodiversity paying special attention to the indigenous communities, recognizing their rights of intellectual property in land maintenance, and respecting the traditions and customs in their local communities.¹⁵⁴ Additionally, the report cites Ley 833, which declared the Island of Ometepe a biosphere reserve.¹⁵⁵ What the report does not mention, however, is that these regulations were repealed in 2013 by the Canal Law. The Conference has taken no action to investigate this abrogation.

Enforcement of state liability and compensation under the Convention has been minimal since its signing in 1992.¹⁵⁶ Under the Convention, states have the responsibility to comply with international environmental laws and are liable when harms cross boundaries.¹⁵⁷ Due to state sovereignty, enforcement actions against states for events that take place completely within their boundaries are difficult to pursue.¹⁵⁸ A state may, however, bring a claim against another nation that caused environmental damage to its natural resources.¹⁵⁹ However, there are no preventative measures to protect or stop harm in progress. Compensation is only available *after* a state can show that damages occurred to its biodiversity due to actions of another state.¹⁶⁰ Moreover, an enforcement action against a state for destroying its own biodiversity is essentially

151. *Id.*; see also Convention on Biological Diversity, *supra* note 24, art. 23.

152. Ministerio del Ambiente y de los Recursos Naturales [Ministry of the Env't & Natural Res.], *V Informe Nacional de Biodiversidad* [*V National Report on Biodiversity*], CONVENTION ON BIOLOGICAL DIVERSITY 25-26 (June 2014), <http://www.cbd.int/doc/world/ni/ni-nr-05-es.pdf>.

153. *Id.* at 48-49.

154. *Id.* at 49.

155. *Id.*

156. See generally U.N. Executive Secretary, *Liability and Redress Under the Convention on Biological Diversity, Review of Relevant International Legal Instruments and Issues for Consideration*, U.N. Doc. UNEP/CBD/WS-L&R/2 (May 15, 2001) (addressing issues of dispute resolution under the Convention).

157. *Id.* at 15.

158. *Id.* at 3.

159. *Id.* at 16.

160. Convention on Biological Diversity, *supra* note 24, art. 14 (emphasis added).

institutionally impossible under the terms of the Convention because all the claims must be submitted to arbitration.¹⁶¹

Finally, article 38 allows parties to withdraw from the Convention at any time after two years from the date from which the Party ratified the agreement.¹⁶² A withdrawing party must simply give written notice to the Secretary-General of the United Nations, who serves as the Depositary for the Convention.¹⁶³ Not only does this withdrawal remove the Party from its benefits and obligations under the Convention, but also from any Protocols.¹⁶⁴ In the context of the Canal, even if an enforcement action was possible, Nicaragua and/or China could simply withdraw from the Convention about one year before any action is taken. This means that at the slightest suspicion of a legal claim, either country could simply move to withdraw from the Convention and avoid liability completely.

IV. THE INTEROCEANIC CANAL: EXPOSING THE CONVENTION'S PROCLIVITY TO INADEQUACY

The clear and stated purpose of the Convention is “the conservation of biodiversity, [and] the sustainable use of its components,” and parties agree to “[i]ntegrate consideration of the conservation and sustainable use of biological resources into national decision-making.”¹⁶⁵ The Canal will impact protected rain forests, biosphere reserves, endangered species, freshwater resources, delicate coastlines, and indigenous people’s rights to the land. While the exact scale of the impact may currently be under debate, there is no denying that effect on these ecosystems will be widespread and inevitable. Nicaragua, by allowing and encouraging such a megaproject, is likely violating its promise to “integrate consideration of conservation . . . into national decision-making.”¹⁶⁶ Further, it is unclear what measures and policies will be in place to ensure the protection of biodiversity as the Canal and its subsidiary projects proceed.

The Convention notes, however, that states have “the sovereign right to exploit their own resources pursuant to their own environmental policies”¹⁶⁷ and that economic development and poverty eradication are the primary and “overriding priorities of developing countries.”¹⁶⁸ Given

161. *Id.* art. 27, annex II.

162. *Id.* art. 38.

163. *Id.* arts. 38, 41.

164. *Id.* art. 38.

165. *Id.* arts. 1, 10.

166. *Id.* art. 10.

167. *Id.* art. 3.

168. *Id.* pmb.

that the majority of diverse and delicate ecosystems are found within the borders of developing countries,¹⁶⁹ these provisions put the very purpose of the Convention at risk in the name of economic growth and development. They essentially negate the objectives of the Convention by allowing biodiversity protection to take a backseat to development, instead of encouraging a means to meet both ends simultaneously. The proposed Canal is a concrete example of the Convention's failure in this regard. The mere glimmer of hope that this project will launch Nicaragua out of poverty is enough to justify the project under this concession.

Moreover, the Convention's broad ambiguous language allows states to take harmful actions that are not expressly prohibited. Without clear definitions of "sustainable use," "conservation," or "natural resources," states are left to mold these terms to best fit their own policy goals with little resistance. Additionally, the incentive measures are definitively based on a contracting state's interpretation of these terms,¹⁷⁰ leaving implementation, regulation, and enforcement to further its own policy objectives. The ambiguous terms lead to exploitation and a sense of entitlement for states to value their resources for only economic growth, rather than for conservation.

It can be argued, however, that the exploitation of biodiversity and natural resources is not the same thing as destruction. The Convention stresses resource use and exploitation for economic gain. Destruction for a tertiary purpose, however, seems to fall outside of this allowance. In the case of the Canal, the destruction of natural resources is not directly related to the ultimate "use" of the resources, but rather complete annihilation for another end. Thus, construction of infrastructure to benefit a foreign corporation falls outside of the scope of the concessions given to developing countries to prefer economic growth to preservation.

Additionally, the project will likely violate the property rights, human rights, and rights of indigenous people and local farmers who will be displaced by the Canal route. Ultimately, the Convention promises what it cannot provide. It mandates protections and values with no means for support or enforcement. The articles mandate the parties to protect and value its human resources to conserve biodiversity, but allow local laws to dominate. State sovereignty permits each country to define its own commitment to the Convention. The Canal Law allows HKND complete rein over some of the world's most precious ecosystems and the

169. Nayar & Ong, *supra* note 23, at 235.

170. Convention on Biological Diversity, *supra* note 24, art. 11.

right to displace Nicaraguan nationals.¹⁷¹ Despite telling Nicaragua what it should and should not do, the Convention does little to discourage such policy decisions.

Finally, the incentive, enforcement, and withdrawal provisions of the Convention prove that the agreement functions less as a binding international commitment, and more as a general guidance document. The agreement does not hold parties accountable for its provisions or even require a commitment to national laws passed to carry out its purpose. The Convention will likely not be able to prevent damage to the delicate ecosystems in and around the new Canal zone, nor to ensure justice for the people who live there. That a party to the Convention can commit such a multidimensional violation under the Convention sets a dangerous precedent for other parties and may further hinder the main objective of conservation of biological diversity.

V. POLICY SUGGESTIONS: A STRONGER CONVENTION FOR THE NEXT GENERATION

The Convention was drafted and ratified over twenty years ago. After twenty years of experience and knowledge, the time has come for a stronger version of the Convention to carry through the commitment recognizing biodiversity as a “global asset of tremendous value to present and future generations.”¹⁷² A stronger Convention must recognize the complicated web of “relationships and interests involved . . . between governments and indigenous people as well as between the latter and non-governmental organisations and private commercial firms.”¹⁷³ Preservation of biodiversity could lead to substantial economic benefits, both nationally and internationally, in the fields of agriculture and medicine¹⁷⁴ that could give developing countries and the global community additional incentives toward conservation. An ideal revision would include the goals and input of the developing world, rather than concessions allowing them to pursue other priorities. With the majority of biodiversity within their borders, developing countries are its greatest keepers and protectors. Incorporating their policy goals and input would likely lead to higher participation and cooperation under the Convention.

171. Ley No. 840, 14 June 2013, *Ley Especial para el Desarrollo de Infraestructura y Transporte Nicaragüense Atingente a El Canal, Zonas de Libre Comercio e Infraestructuras Asociadas* [Special Law for the Development of Nicaraguan Infrastructure and Transportation Regarding the Free Trade Zones and Associated Infrastructure in the Canal Zone] art. 12, LA GACETA, DIARIO OFICIAL [L.G.], 14 June 2013 (Nicar.).

172. *History of the Convention*, *supra* note 1.

173. Woodliffe, *supra* note 88, at 267.

174. *See* Freestone, *supra* note 79, at 93.

Additionally, the Conference of parties could take a more active role in monitoring compliance with the Convention. For example, they could review EIAs for large projects, especially if the project could compromise an existing biosphere or protected area previously established under the Convention. They could also request proof of public participation and enforcement of property rights, and require a minimum level of transparency for high-risk projects. While a permit-like program may be too formal for an international agreement, a concrete indicator would be useful to signal to the other parties that due care was taken to ensure the highest standard of protection of biodiversity as large projects move forward. Further, it is likely that countries, especially developing countries, would respond more positively to incentives to preserve biodiversity rather than after-the-fact punitive measures.¹⁷⁵ These incentives could be in the form of increased information sharing, financial gain from ecotourism initiatives, and funding for increased research of delicate areas.

Finally, a stronger Convention would include clearer definitions of key terms such as “sustainable use” and “conservation” defining boundaries and baselines. While an extremely specific definition could cause just as much ambiguity as the current broad one, a definition that includes baselines and benchmarks would still leave room for states to fill in the implementation gaps while providing more guidance. Based on the priorities of the current Convention, a stronger Convention could emphasize technological innovations such as biotechnological and medical advances,¹⁷⁶ while prohibiting activities such as complete destruction for unrelated infrastructure. Providing such guidelines would limit damage of biodiversity without infringing on state sovereign decision-making. These adjustments would provide a forum for increased participation and enforcement to reach the ultimate objective of global biodiversity conservation.

VI. CONCLUSIONS

There is no doubt that the proposed Interoceanic Canal will wreak ecological disaster and destroy numerous protected ecosystems and species. If the project goes forward as planned, Nicaragua will likely violate provisions of the Convention regarding public participation, indigenous populations, and its responsibility to protect delicate and protected ecosystems. It is still to be seen whether the parties to the

175. Johnston, *supra* note 114, at 60, 63-64.

176. See Freestone, *supra* note 79, at 94.

Convention will confront Nicaragua in this regard, or whether it will allow economic goals to win out over environmental protection and international law obligations. At its core, the Convention values states' rights to exploit and profit from the resources within their boundaries in a "sustainable" way, over the inherent value of preservation of biodiversity in its own right.

While the best thing for the environment and indigenous people would be stop the project completely, there may be little hope for intervention under the current Convention for Biological Diversity to preserve the protected regions, unique ecologies, and indigenous people of Nicaragua from HKND and the Canal. A real solution would have to come in the form of a stronger Convention that could prevent such monstrous projects in the future.