“GIVE THEM A DAM BREAK!” PROTECTING THE NGÄBE BUGLÉ COMMUNITY OF PANAMA WITH CLEAN DEVELOPMENT MECHANISM SAFEGUARDS TO PROMOTE CULTURALLY SENSITIVE DEVELOPMENT

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INTRODUCTION

Nestled along the banks of the Tabasará River is Panama’s largest indigenous community, the Ngäbe-Buglé¹ (pronounced naw-bey boog-lay)² who occupy one of the nation’s comarcas³ legally reserved to them by the government.⁴ For the most part, the Ngäbe live in the minimalist tradition of farming, fishing, and hunting.⁵ Their lives are simple and, like

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¹ This indigenous community was originally known as the Guaymi and was also known as the Ngöbe who have a close affiliation with the Buglé. Together, this indigenous group is collectively known as the Ngäbe-Buglé. World Directory of Minorities and Indigenous Peoples - Panama : Guaymi (Ngöbe-Buglé), MINORITY RTS. GROUP INT’L, (Dec. 2008), http://www.refworld.org/docid/49749cce1e.html (last visited May 14, 2014). [hereinafter World Directory].


³ See World Directory, supra note 1 (stating that a comarca is an indigenous reserve); but see Stefanie Wickstrom, The Politics of Development in Indigenous Panama, 30 LATIN AM. PERSP. 43, 68 (2003), available at http://www.jstor.org/stable/3185059 (last visited May 14, 2014) (stating “reserves were granted before the concept of comarca came into being).

⁴ World Directory, supra note 1.

other indigenous communities, their continued survival is inextricably tied to their land.\(^6\)

Recently disrupting their tranquil existence is the incessant sound of heavy machinery in the distance. The Ngäbe’s way of life is threatened by the ongoing construction of the Barro Blanco dam.\(^7\) This dam would displace the Ngäbe by threatening to flood several homes, schools, and farms.\(^8\) The free-flowing Tabasará with its abundant fish and crustaceans would be converted into a pool of standing water, breeding bacteria, mosquitos and, ultimately, disease.\(^9\) Unfortunately, Barro Blanco is only one in a series of many hydroelectric projects endangering the Ngäbe way of life.\(^10\)

As one of Latin America’s fastest-growing economies, Panama is moving forward with the Barro Blanco and similar hydroelectric projects to

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\(^6\) Randall S. Abate & Elizabeth Ann Kronk, *Commonality Among Unique Indigenous Communities: An Introduction to Climate Change and Its Impacts on Indigenous People*, in *CLIMATE CHANGE AND INDIGENOUS PEOPLES: THE SEARCH FOR LEGAL REMEDIES* 4 (2013) (quoting S. JAMES ANAYA, *INTERNATIONAL HUMAN RIGHTS AND INDIGENOUS PEOPLES* 1 (2009) (explaining that indigenous people include a diverse group of communities who are indigenous because their ancestral roots are embedded in the lands on which they live, or would like to live, much more deeply than the roots of more powerful sectors of society living on the same lands or in close proximity. And they are peoples in that they comprise distinct communities within a continuity of existence and identity that links them to the communities, tribes, or nations of their ancestral past.).


\(^9\) Id.

\(^10\) Id.; see also UN Representative on Indigenous Peoples Asked to Investigate Human Rights Violations Caused by Panama’s Barro Blanco Dam, THE CTR. FOR INT’L ENVTL. LAW (June 18, 2013), http://www.ciel.org/Law_Communities/BarroBlanco_18Jun2013.html (last visited May 19, 2014) [hereinafter UN Special Rapporteur] (discussing NGO’s urging the UN Special Rapporteur to investigate human rights violations as a result of the Barro Blanco dam).
meet the country’s rising demand for electricity. Consequently, the rights of the Ngäbe are a mere afterthought. Although Panama expressed assurances that Ngäbe lands would be protected, portions of the land have already been expropriated for the development of the dam without the Ngäbe’s consent, contrary to Panamanian law. Indeed, by mid-2014 the dam may be complete unless construction is halted. Specifically, Ley 10 de 1997 and its progeny protect indigenous lands in Panama and prohibit such takings without the indigenous community’s consent. However, indigenous rights often take a back seat to Panama’s hunger for socioeconomic growth.

In addition to domestic protections, there are international laws that protect indigenous rights, such as the International Labour Organization Convention No. 169 (ILO 169) and the United Nations Declaration on the Rights of Indigenous People (UNDRIP). The Barro Blanco project violates international law because the Ngäbe’s right to free, prior, and informed consent was not observed. Despite these human rights violations, projects like the Barro Blanco are registered under the Clean Development Mechanism (CDM) of the Kyoto Protocol. While there are many organizations assisting the Ngäbe in fighting for their protections, construction of the Barro Blanco dam and other similar projects persists because there is no way for the indigenous community to formally register

12 Wickstrom, supra note 3, at 45.
15 Wickstrom, supra note 3, at 45.
16 See generally Letter, supra note 14.
17 Registered as Project 3237 under the CDM. Project 3237: Barro Blanco Hydroelectric Power Plant Project, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://cdm.unfccc.int/Projects/DB/AENOR1261468057.59/view (last visited May 19, 2014) [hereinafter Project 3237].
its complaints under the CDM because the CDM does allow public comments outside of the thirty-day comment period.\textsuperscript{18}

Part I of this article discusses the effects of hydroelectric power projects such as the Barro Blanco Dam on the Ngäbe. It examines how the Panamanian government’s exploitation of indigenous lands places the Ngäbe in jeopardy of losing significant portions of their territory to hydroelectric projects. It also explores the Panamanian government’s desire to increase its energy production through hydroelectric projects, the effects of these projects on indigenous communities, and the tension created by each party’s demands. Part II analyzes existing international and domestic protections for indigenous peoples and the failure of each to shield the Ngäbe from human rights violations; specifically, violation of their right to free, prior, and informed consent. Part III examines the CDM’s processes, its shortcomings with regard to the registration process, and how these deficiencies facilitate human rights violations.

Part IV proposes three possible remedies to assist the Ngäbe. First, the existing CDM standards should be adjusted to predicate registration on current and continued compliance with indigenous human rights protections that comport with international and domestic law. Second, an access to justice mechanism should be established through which indigenous peoples and other affected parties can register complaints and report violations of CDM standards. Finally, Panama should embrace indigenous knowledge as a valuable instrument that could provide traditional solutions to contemporary problems.

\textsuperscript{18} UN Special Rapporteur, supra note 10; see also Groups Support Challenge to Dam Project in Panama for Violating Indigenous Rights, THE CTR. FOR INT’L ENVT'L. LAW, (Aug. 29, 2013), http://www.ciel.org/Law_Communities/BarroBlanco_29Aug2013.html (last visited May 14, 2014)(stating several NGO’s including The Center for International Environmental Law, Earthjustice, the Interamerican Association for Environmental Defense (AIDA), and Earthjustice, recently supported an amicus brief filed by the Environmental Advocacy Center, Panamá (CIAM) in the Panama Supreme Court of Justice arguing that the Ngäbe’s right to free, prior, and informed consent was violated when they were not adequately consulted regarding the Barro Blanco dam).
I. **THE STRUGGLE BETWEEN CULTURAL TRADITION AND DEVELOPMENT**

The Ngäbe-Buglé are an indigenous community struggling for survival amidst the continued advancement of hydroelectric projects threatening to displace them from lands legally granted to them by the government of Panama.\(^{19}\) While Panama’s need to produce its own electricity compels the government to find alternatives to meet this need,\(^{20}\) the consequences of choosing hydroelectric projects to generate electricity imperil the land and culture of the Ngäbe community.\(^{21}\)

**A. The Ngäbe-Buglé of Panama**

El Comarca Ngäbe-Buglé is located in western Panama and is comprised of lands from the Bocas Del Toro, Chiriquí, and Veraguas provinces.\(^{22}\) The comarca’s creation was the result of a protracted political battle between the indigenous community and the Panamanian government.\(^{23}\) The Ngäbe have lived in western Panama for approximately 500 years and during this time they consistently fought to have clearly demarcated boundaries to prevent intrusion, exploitation, or misappropriation of their lands.\(^{24}\) Although the Ngäbe occupied a substantial portion of western Panama, cattle ranchers, coffee growers,

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\(^{21}\) Swyter, *supra* note 19.


and banana plantations gradually displaced the Ngäbe. In response, the Ngäbe mobilized as a collective unit to defend their lands.

Amidst a burgeoning movement that would reinforce the Ngäbe’s cultural identity and Latin America’s interest in fostering positive relations with its indigenous peoples, the Panamanian government took initial steps to further this interest. According to one author, “[f]or the first time in Panamanian history, the Panamanian Constitution of 1972 declared that indigenous lands must be given as property, and not under some type of usufruct arrangement.” To that end, special laws established land rights—one for each indigenous group—governed by executive decree, creating an autonomous region, and giving the people freedom to control the use of their lands. Moreover, the Ngäbe—who had been protesting and petitioning for over 40 years—were finally granted a comarca, which was created by Panama Ley 10 de 1997 (Ley 10).

Ley 10 only granted the Ngäbe half of the land they requested, leaving a significant portion of the people to live outside the territory. The text of Ley 10 refers to additional lands that were supposed to be

26 The Ngäbe organized in response to the teachings of Mama Chi, who emphasized the importance of traditional Ngäbe rituals and their unique cultural identity. Wickstrom, *supra* note 3, at 55-56.
28 *Id.* According to Black’s Law Dictionary, a usufruct is the right of using and enjoying, usually for life, the property belonging to another. BLACK’S LAW DICTIONARY 1684 (2009). This is an important distinction to make because the comarca status grants indigenous peoples collective ownership to the reserved lands.
29 *Id.*
30 Comarca Ngäbe-Buglé, COMARCAANGOBEBUGLE.COM, http://comarcangobebugle.com/2011/03/the-comarca-Ngöbe-bugle/ (last visited May 19, 2014); see also Wickstrom *supra* note 3, at 58 (stating the Ngöbe took measures such as marching and hunger strikes to gain the attention of the government and the general public).
31 The Ngöbe were granted a comarca for 650,000 hectares (or 1,495,000 acres). Wickstrom, *supra* note 3, at 50.
annexed to the Ngäbe-Buglé *comarca*; however, this has not been done.\(^{33}\) Thus, the Ngäbe persist in seeking the legal demarcation of the annexed areas.\(^{34}\) The significance of demarcation lies in the fact that as the government yields to pressure from speculators and investors wanting to develop and commercialize the area, the Ngäbe continue to suffer a constant loss of lands that were originally subject to annexation.\(^{35}\)

Despite having less land than originally intended, the Ngäbe continue to practice traditional subsistence survival, which includes slash-and-burn agriculture.\(^{36}\) Their major produce includes corn, beans, rice, bananas, and root vegetables.\(^{37}\) Slash-and-burn agriculture was a sustainable means of agriculture until the 1960s.\(^{38}\) However, over the years, the Ngäbe population increased exponentially, further underscoring their need to protect the lands they have and to receive the lands promised them in Ley 10.\(^{39}\) The growing population caused an intensification of the demand for agriculture.\(^{40}\) Some Ngäbe turned to temporary labor outside the *comarca* to meet their needs, which undermines the Ngäbe’s communal agricultural practices.\(^{41}\) Culturally, the Ngäbe have a communal (collective) view of rights; thus to the Ngäbe,


\(^{34}\) del Rosario, *supra* note 24, at 16.

\(^{35}\) *Id.*; see further discussion on Ley 10 *infra* Part II.

\(^{36}\) Bort & Young, *supra* note 25, at 124; “Slash-and-burn” farming is a form of shifting agriculture where the natural vegetation is cut down and burned as a method of clearing the land for cultivation. When the plot becomes infertile, the farmer moves to a new fresh plot. This process is repeated over and over. “Slash-and-burn” is also known as “swidden” or “shifting” agriculture. *What is Slash and Burn Farming?*, RAINFOREST SAVER, http://www.rainforestsaucer.org/what-slash-and-burn-farming (last visited May 14, 2014).

\(^{37}\) Bort & Young, *supra* note 25, at 124.

\(^{38}\) *Id.* at 127.

\(^{39}\) *Resultados Finales Básicos, CONTRALORÍA GENERAL DE LA REPÚBLICA DE PANAMÁ INSTITUTO NACIONAL DE ESTADÍSTICA Y CENSO,* http://www.contraloria.gob.pa/inec/Publicaciones/Publicaciones.aspx?ID_SUBCATEGORIA=59&ID_PUBLICACION=360&ID_IDIOMA=1&ID_CATEGORIA=13(last visited May 19, 2014) (Click on “Cuadro 1”) (showing that according to Panama’s census bureau, the Ngöbe totaled 72,450 in 1990, 110,087 in 2000, and 156,747 in 2010).

\(^{40}\) See Bort & Young, *supra* note 25, at 127 (discussing the increased Ngäbe population).

\(^{41}\) Wickstrom, *supra* note 3, at 50.
collective rights come first and are held in higher esteem than individual rights.\textsuperscript{42} The significance of communal lands is best understood by the statement of one Ngöbe resident in response to land titling initiatives: "Ngöbe land is like a house. You cannot just sell your room without consulting your parents. However, a title gives you the right to do just that."\textsuperscript{43}

In addition to agriculture, the Ngöbe also raise livestock.\textsuperscript{44} The Ngöbe depend on domestic animals such as cattle, pigs, and chicken. They supplement their diets by hunting and fishing.\textsuperscript{45} Varied species of fish and shrimp are very important sources of dietary protein for the Ngöbe people.\textsuperscript{46} The completion of the Barro Blanco dam would destroy the fragile ecosystem of the Tabasará River. In addition to flooding the nearby agriculture, the dam would destroy the population of migratory fish and the abundant shrimp found in the river.\textsuperscript{47} In fact, this dam would create a barrier with an entirely new reservoir lake resulting in an extremely different environment.\textsuperscript{48}

This is not the first time the Ngöbe have had to defend their lands from development projects. In fact, Barro Blanco is one of many hydroelectric projects to infringe on indigenous territory.\textsuperscript{49} In reviewing the

\begin{footnotes}
\footnote{42}{del Rosario, supra note 24, at 14.}
\footnote{43}{Id.}
\footnote{44}{Bort & Young, supra note 25, at 124.}
\footnote{45}{Id.}
\footnote{48}{Dr. William O. McLarney, et. al., \textit{The Threat to Biodiversity and Ecosystem Function of Proposed Hydroelectric Dams in the La Amistad World Heritage Site, Panama And Costa Rica}, UNESCO WORLD HERITAGE COMM., 13 (Feb. 2010), \textit{available at} http://www.biologicaldiversity.org/programs/international/pdfs/UNESCO_PDF.pdf (last visited May 19, 2014).}
\end{footnotes}
boundaries of the Ngäbe-Buglé comarca, there are numerous plans affecting each of its three provincial locations, forming a collective of projects threatening to further shrink the Ngäbe living area.\(^{50}\) In the Chiriquí province alone, there are at least nineteen dams that are either have built or are in progress.\(^{51}\)

In 1981, Panama authorized the development of Tabasara I, which would have been used to supply power to the Cerro Colorado Copper Mining Project.\(^{52}\) However, they eventually cancelled the project after the community through widespread opposition and protests rejected it.\(^{53}\) Later in 1997, a conglomerate organized to develop the Tabasará I and Tabasará II hydroelectric dams.\(^{54}\) The communities surrounding the Tabasará River became aware of the project during the Environmental Impact Studies and quickly began to mobilize.\(^{55}\) In response, they created an indigenous resistance group, El Movimiento 10 de Abril (M10), to defend the Ngäbe’s rights and to stand against the building of a dam across the Tabasará.\(^{56}\) Ultimately, the Panamanian government cancelled the project, but the threat of dam construction in the area persisted.

\(^{50}\) Id.

\(^{51}\) Id.

\(^{52}\) Britnae Purdy, Ignoring FPIC Leads to 30 Years of Protest, Violence, and Profit-Loss in Panama, FIRST PEOPLES WORLDWIDE, (Aug. 7, 2013), http://firstpeoples.org/wp/tag/tabasara-river/ (last visited May 19, 2014); see also Wickstrom, supra note 3, at 50 (stating an abundance of copper was discovered under Cerro Colorado (part of Ngöbe lands) and after much exploration the government moved forward with granting mining concessions to reap the benefit of revenue flowing from the project).

\(^{53}\) Id.


\(^{55}\) Id.

\(^{56}\) Nick Swyter, Panama: The Indigenous Activists Who Paralyzed a Nation, PULITZER CTR. ON CRISIS REPORTING, (July 30, 2013), http://pulitzercenter.org/reportingcentral-america-panama-comarca-ngäbe-buglé-barro-blanco-genisa-hydroelectric-dam-tabasará-river-infrastructure-sustainable-indigenous-legal-activist-mine; see FAQ’s, GENISA, http://www.genisa.com.pa/en/faqs/ (last visited May 14, 2014) (addressing the suggestion that Barro Blanco is a revival of the Tabasara I project, but Generadora del Itsmo, S.A. (GENISA), the developer undertaking Barro Blanco project, denies this allegation and insists that Barro Blanco has no relation with the Tabasara I project); see also Chronology of Events for Barro Blanco Dam (Panama), supra note 54 (stating

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The Ngäbe were also threatened with the completion of the Changuinola 1 (Chan 75) hydroelectric project planned in the Boca del Toro province on the Changuinola River. This particular project was the subject of ongoing litigation involving indigenous opposition and abuses of the Ngäbe people by the government and AES Corporation. The dam threatened to displace more than 1,000 Ngäbe people and destroy essential resources such as fish and shrimp, which would adversely affect the existence of certain wildlife. The Ngäbe were also subject to numerous acts of violence, coercion, manipulation, and lies to advance the project. After numerous attempts to halt the project, Chan 75 was completed in 2011 and, as predicted, approximately 1,000 people (180 Ngäbe families) were displaced. Though AES Corporation promised to resettle the affected indigenous communities prior to completion, the proposed resettlement communities have not been completed, leaving the families to live in poor facilities with no land to cultivate for their survival.

GENISA received funding for Barro Blanco from FMO of Netherlands, DEG of Germany, and EIB; however, GENISA withdrew its loan application from EIB due to mounting pressure on EIB from NGO’s and those funds were replaced by funding from Central American Bank of Economic Integration (CABEI).

57 See ACD Comments on Changuinola 1 (Chan 75) Large Hydro Project (Panama), INTERCONTINENTAL CRY, http://www.internationalrivers.org/resources/acd-comments-on-changuinola-1-chan-75-large-hydro-project-panama-3157 (last visited May 14, 2014) [hereinafter ACD Comments].
58 Id. In fact, based on a report provided in 2009 by Professor James Anaya, U.N. Special Rapporteur on the Rights of Indigenous People, the Inter-American Court of Human Rights asked the government to suspend the project during investigations, but the government disregarded this request. Jennifer Kennedy, Damming the Ngäbe: Aftermath of an AES Power Project in Panama, CORPWATCH, (Oct. 15, 2012), http://www.corpwatch.org/article.php?id=15788 (last visited May 19, 2014).
60 Id. Some abuses that occurred include residents being induced to sign fraudulent agreements that they did not understand since they were written in Spanish (a language that the majority of Ngäbe do not read or write), and as a result their farms were demolished. In addition, women, children, and the elderly were subject to acts of violence. Id.
61 Kennedy, supra note 58.
Although the Ngäbe are not the only indigenous community to face this type of challenge, their land is uniquely vulnerable because of its history of repeated intrusion and appropriation by the government. Moreover, the continued advancement of hydroelectric projects threatens to consistently diminish the Ngäbe lands though the expropriation of portions of their territory, which the government deems necessary to accommodate these projects. Thus, it is imperative that projects like the Barro Blanco are prevented to preserve the Ngäbe territory and to preclude further diminution of their lands.

B. Panama’s Quest for Modernization

Panama is one of Latin America’s fastest-growing economies. Panama’s growth is being driven in part by construction of commercial and residential real estate flowing from an influx of foreign funding. With increased economic development comes a demand for power to support its growth. The demand for electricity stems predominantly from the commercial sector. For example, the expansion of the Panama Canal is one such project that is pushing Panama close to the limits of its energy capacity. Thus, in response to its increasing demand for energy, Panama has agreed to commence numerous hydroelectric power

(discussing AES’s resettlement plans which failed to materialize in time to assist the indigenous communities).

63 See Wickstrom, supra note 3, at 49-50.
64 See Purdy, supra note 52.
66 Dire Straits, supra note 7, at 7.
67 Id.
68 See Ángel Ricardo Martínez, Panama: The Challenges Ahead, LATIN TRADE, (Feb. 13, 2013), http://latintrade.com/2013/02/panama-the-challenges-ahead (last visited May 19, 2014) (stating “[t]he construction of … the $5.2-billion Panama Canal expansion and a $1.8-billion subway in the capital city, have boosted the country’s economy to 10.5 percent growth in 2012, slightly less than the 10.6 percent in 2010, and reduced unemployment to 4.8 percent in 2012.”).
69 Swyter, supra note 19.
projects. In fact, hydroelectric power generates sixty percent of the nation’s electricity.\textsuperscript{70}

Hydroelectric power or \textit{hydropower} is a mechanism that creates electricity through energy harvested from flowing water.\textsuperscript{71} The most common source of hydropower is dams, which use the water flowing through its turbines to generate electricity.\textsuperscript{72} There has been consistent growth of Panama’s energy sector with hydropower playing a major role in its expansion.\textsuperscript{73} In fact, Panama has hydropower investments totaling one billion dollars with 95 percent of these projects located in the Chiriqui and Bocas del Toro provinces.\textsuperscript{74} Barro Blanco is one of many dams proposed by the Panamanian government.\textsuperscript{75}

While hydropower projects promise to deliver additional sources of clean energy amidst global climate change concerns, dams, in particular, have catastrophic effects on rivers, the neighboring area, and on the indigenous peoples residing there.\textsuperscript{76} According to the World Commission on Dams (WCD), “[d]ams transform landscapes and create risks of irreversible impacts.”\textsuperscript{77} WCD further noted that “the end of any dam project must be the sustainable improvement of human welfare. This means a significant advance of human development on a basis that is economically

\begin{flushleft}
\textsuperscript{72} Id.
\textsuperscript{73} \textit{Dire Straits, supra} note 7, at 3.
\textsuperscript{75} \textit{Dire Straits, supra} note 7, at 7.
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viable, socially equitable, and environmentally sustainable.\textsuperscript{78} Thus, dams invading and destroying indigenous lands cannot be said to achieve these ends completely.

First, the obvious effects of dams on the basic dynamics of rivers cannot be overlooked. Free-flowing rivers are transformed into reservoirs containing stagnant water thereby changing the temperature, chemical, and physical composition of the water body. This essentially establishes a new body of water which hosts non-native species, and destabilizes the surrounding environmental community.\textsuperscript{79} In addition, the river’s downstream areas experience some of the most devastating consequences since plants and wildlife can suffer a complete loss of irrigation and water availability. Also, since the dam holds back sediment used to replace the riverbeds downstream those areas are subject to erosion, thus reducing fish habitats.\textsuperscript{80}

Second, the negative impacts of dams on fish are also of paramount importance. According to the WCD, “detailed studies in North America indicate that dam construction is one of the major causes of freshwater species extinction.”\textsuperscript{81} As a physical barrier to movement, dams prevent the migration patterns of several species of fish that move upstream and downstream, like salmon and eels. Although mechanisms such as fish passes\textsuperscript{82} help to mitigate the damage caused by dams, they have been largely unsuccessful because the force of the current functions as a navigation device on which the fish rely to determine which direction they should travel.\textsuperscript{83} As a result, dams also have severe social and

\textsuperscript{78} Id. at 2.
\textsuperscript{79} INT’L RIVERS, supra note 76. Non-native species include any organisms such as snails, algae, and predatory fish that destabilize the existing organisms that reside in the river.
\textsuperscript{80} Id.
\textsuperscript{81} WORLD COMM’N ON DAMS, supra note 77, at 82.
\textsuperscript{82} Id. (Box 3.5 discussing fish passes used as mitigation measures); see also What is a Fish Ladder and Weir?, Mich., http://www.michigan.gov/dnr/0,4570,7-153-10364_52259_19092-46291---,00.html (last visited May 19, 2014).
\textsuperscript{83} WORLD COMM’N ON DAMS, supra note 77, at 82.
economic impacts on fisheries and communities such as the Ngäbe that depend exclusively on subsistence agriculture and fishing to survive.\textsuperscript{84}

Finally, indigenous groups who benefit the least from hydropower projects are disproportionately affected by the construction of dams.\textsuperscript{85} As a result of the sheer special requirements of such large-scale projects as dams, indigenous communities are largely physically displaced.\textsuperscript{86} Complete destruction of ancestral land further compounds the impact dam construction has on the indigenous way of life.\textsuperscript{87} Moreover, since many existing legal protections do little or nothing to preserve indigenous rights to land, such displacement can activate a legal domino effect that ultimately results in catastrophic results for indigenous communities who may or may not have legal title to their territories.\textsuperscript{88} Considering the magnitude of damage caused by dams, the impending completion of Barro Blanco contributes to the Ngäbe’s mounting trepidation concerning the continued commencement of hydropower projects.\textsuperscript{89}

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\item \textsuperscript{84} Id. at 84.
\item \textsuperscript{85} Id. at 98.
\item \textsuperscript{86} WORLD COMM’N ON DAMS, supra note 77, at 102; see also Mary Finley-Brook & Curtis Thomas, \textit{Renewable Energy and Human Rights Violations: Illustrative Cases from Indigenous Territories in Panama}, \textit{Annals Ass’n of Am. Geographers}, 863, 864 (2011) (discussing the displacement of four Ngöbe villages as a result of the Chan 75 dam).
\item \textsuperscript{87} WORLD COMM’N ON DAMS, supra note 77, at 115.
\item \textsuperscript{88} See generally id. at 111; see also id. (discussing the plight of Panama’s Kuna and Embera tribes and their forced resettlement onto less fertile land that is subject to encroachment because of the Bayano dam construction and documenting large-scale indigenous displacement occurring in other countries besides Panama, including Indonesia, Malaysia, Thailand, Brazil, Argentina, Mexico, Colombia, Guatemala, United States, Canada, and Siberia).
\item \textsuperscript{89} See Mary Finley-Brook & Curtis Thomas, \textit{Treatment of Displaced Indigenous Populations in Two Large Hydro Projects in Panama}, 3 \textit{Water Alternatives}, 269, 273 (2010), available at http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCwQFjAA&url=http%3A%2F%2Fwww.water-alternatives.org%2Findex.php%3Foption%3Dcom_docman%26task%3Ddoc_download%26gid%3D93&ei=bsmGUrvsM8bE2gXT9YAQ&usg=AFQjCNExBpKXJFSFXPWqYAIhSQUGvuLSXA&sig2=ItyDi3b6Pik-d3Gn31y6Ug (last visited May 19, 2014) (discussing the aftermath of the Byana hydroelectric built on Kuna lands in Panama, which flooded the area and forced the resettlement of 1,500 Kuna and 500 Emberà people in western Panama).
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Yet, in spite of the devastating effects of dams, hydropower continues to be Panama’s preferred means of generating electricity despite the availability of other sources of renewable energy. In addition, according to one study, the Chiriquí province has the highest hydropower potential in Panama, which explains why developers so heavily target Ngäbe lands. In fact, hydropower projects have greatly exploited the area’s free-flowing rivers. According to one author, should Panama succeed in completing all proposed hydro projects, none of Panama’s rivers would be free flowing—all would be dammed.

II. EXISTING LEGAL PROTECTIONS FOR INDIGENOUS PEOPLES

International and domestic legal frameworks exist in Panama to protect indigenous lands from exploitation. The international conventions addressed in this article are the product of tireless efforts by various entities such as indigenous groups and NGO’s in promoting the idea of indigenous rights. In addition, domestic law recognizes the rights of indigenous communities’ collective ownership of land. Despite these protections, indigenous rights are often trampled when the interests of the State or developers conflict with these rights.

90 A. Sebastiano Giardinalla, et al., Status of the Development of Renewable Energy Projects in the Republic of Panama, INT’L CONF. ON RENEWABLE ENERGIES AND POWER QUALITY, http://www.icrepq.com/icrepq’11/337-giardinella.pdf (last visited May 15, 2014) (stating the availability of other energy sources such as wind, solar, geothermal, and peat in Panama); see also Panama Seeks Solutions to Drought-Driven Energy Crisis, supra note 20, (noting that Panama schools and government offices have been shut down and power has been rationed in an effort to conserve electricity due to drought concerns, and that due to the lack of rain, Panamanian officials were forced to purchase electricity from neighboring countries such as Nicaragua and Honduras).
91 Id.; see also Dire Straits supra note 7, at 7 (stating that the Chiriquí province contains richest supply of water).
92 Dire Straits, supra note 7, at 12.
93 Id. at 7.
95 del Rosario, supra note 24, at 8-9.
A. Indigenous Rights Protections in International Law

There are two international law instruments dealing specifically with indigenous rights—The International Labour Organization Convention Number 169 on Indigenous and Tribal People, and the United Nations Declaration on the Rights of Indigenous Peoples. These two sources provide valuable protections for indigenous communities.

1. Panama’s Failure to Ratify International Labour Organization Convention No. 169

International Labour Organization Convention Number 169 on Indigenous and Tribal People (ILO 169) is “a legally binding international instrument open to ratification that deals specifically with the rights of indigenous and tribal peoples.” ILO 169 does not provide a definition of indigenous peoples, but it does provide criteria that are helpful in identifying the people ILO 169 protects. A revision of prior ILO 107, ILO 169 recognizes the “aspirations of [indigenous] peoples to exercise control over their own institutions, ways of life and economic development and to maintain and develop their identities, languages and religions . . .”

98 Id. (according to the ILO, the following criteria are helpful in identifying indigenous (or tribal) people:

“[t]raditional life styles; [c]ulture and way of life different from the other segments of the national population, e.g. in their ways of making a living, language, customs, etc.; [o]wn social organization and political institutions; and [as to indigenous only][l]iving in historical continuity in a certain area, or before others “invaded” or came to the area.”).
99 See ILO 169, pmbl, supra note 96.
Currently, there are twenty-two countries that have ratified ILO 169, and while Panama has promised to ratify ILO 169, to date it has not.\(^{100}\)

ILO 169’s predecessor, ILO 107, “was a first attempt to codify international obligations of States in respect [to] indigenous and tribal populations and was the first international convention on the subject[.]”\(^{101}\) However, ILO 107 “contain[ed] a fundamental flaw” in that it refers to indigenous people as *less advanced* and that it *promotes eventual integration* of the indigenous into the society at large rather than promoting their right to self-determination.\(^{102}\) Although ILO 107 is no longer open to ratification, it remains in force in eighteen countries—including Panama—until these countries ratify ILO 169.\(^{103}\)

One of the main differences between ILO 107 and ILO 169 is the overall view of indigenous peoples in each instrument. ILO 107 was developed with the understanding that indigenous communities were only temporary and would eventually be integrated into society at large.\(^{104}\) By contrast, ILO 169 was drafted with the idea that indigenous peoples are permanent societies and deserve communal lands.\(^{105}\) This instrument posits that indigenous communities have a right to survival and to

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\(^{102}\) Lee Swepston, *A New Step In the International Law On Indigenous and Tribal Peoples: ILO Convention No. 169 of 1989, 15 OKLA. CITY U. L. REV. 677, 682 (1990) (emphasis added); see KAREN ENGLE, THE ELUSIVE PROMISE OF INDIGENOUS DEVELOPMENT: RIGHTS, CULTURE, STRATEGY 36-37 (2010) (discussing the integration aspect of ILO 107); *see also* Miranda, *supra* note 94, at 52 (discussing that the concept of self-determination signifies that indigenous peoples have the right to *freely* determine their own political status and pursue their own development).

\(^{103}\) *ILO. 107, supra* note 101.

\(^{104}\) *Id.*

\(^{105}\) *Id.*
determine their own progression. Along with land rights, ILO 169 recognizes the right of indigenous people to be engaged in decisions affecting their lands. Article 6 of ILO 169, which has been called the “heart of the convention,” provides,

In applying the provisions of this Convention, governments shall: (a) consult the peoples concerned, through appropriate procedures and in particular through their representative institutions, whenever consideration is being given to legislative or administrative measures which may affect them directly; (b) establish means by which these peoples can freely participate, to at least the same extent as other sectors of the population, at all levels of decision-making in elective institutions and administrative and other bodies responsible for policies and programmes which concern them; (c) establish means for the full development of these peoples' own institutions and initiatives, and in appropriate cases provide the resources necessary for this purpose. The consultations carried out in application of this Convention shall be undertaken, in good faith and in a form appropriate to the circumstances, with the objective of achieving agreement or consent to the proposed measures.

Under Article 6 of ILO 169, Panama would have a legal obligation to actively engage the Ngäbe in discussions regarding any projects affecting their comarca.

Conversely, Article 12 of ILO 107, while acknowledging that people such as the Ngäbe may already occupy land identified for development and obligating the government to obtain free consent from the community

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106 Swepston, supra note 102, at 690.
107 Id.
109 ILO 169, supra note 96, at art. 6. [emphasis added].
prior to removal, leaves room for the government to take the lands.\textsuperscript{110} It indicates instances where indigenous peoples may be removed without free consent, which includes if the displacement is in the interest of economic development.\textsuperscript{111} Article 12 of ILO 107 further states that if indigenous peoples are removed from the lands, the country is obligated to either find them a suitable replacement or provide full compensation for the loss of land and any resulting injury.\textsuperscript{112}

While Article 12 of ILO 107 may appear to protect indigenous communities and provides suitable alternatives for their survival, it does not. It directly undermines their existence by presuming these people can simply be relocated to other areas.\textsuperscript{113} The term \textit{indigenous} signifies that communities like the Ngäbe are spiritually connected to their lands because their \textit{ancestral roots are embedded in the land on which they live}, which distinguishes them from the community at large.\textsuperscript{114} Thus, relocation is not an appropriate alternative given their inextricable connection to their land. Other significant provisions of ILO 169 further advance this understanding of \textit{indigenous} and safeguard indigenous territories by acknowledging that indigenous people have the right to be actively engaged in any decision affecting their lands.\textsuperscript{115}

According to Professor S. James Anaya, United Nations Special Rapporteur on the Rights of Indigenous People,

\textit{[A]n important advancement for the recognition of the rights of indigenous peoples would be the ratification of International Labour Organization Convention No. 169 concerning Indigenous and Tribal Peoples in Independent Countries. Panama is one of the few countries in Latin America that has not yet ratified the Convention. Convention No. 169 is an instrument that compliments the United}

\textsuperscript{110} ILO 107, art. 12(1); \textit{see also} Tara Ward, \textit{The Right to Free, Prior, and Informed Consent: Indigenous Peoples' Participation Rights Within International Law}, 10 NW. J. INT’L HUM. RTS. 54, 59 (2011).
\textsuperscript{111} \textit{Id.}
\textsuperscript{112} ILO 107, \textit{supra} note 101, at art. 12 §§ 2, 3.
\textsuperscript{113} \textit{See Id.}
\textsuperscript{114} Abate & Kronk, \textit{supra} note 6.
\textsuperscript{115} KRAVCHENKO, \textit{supra} note 108, at 161-163.
Given the tremendous benefit ILO 169 provides to indigenous peoples, ILO 169’s ratification would demonstrate Panama’s commitment to protecting its indigenous communities’ culture and right of self-determination.

2. United Nations Declaration on the Rights of Indigenous Peoples

In addition to ILO 169, indigenous peoples enjoy protections afforded by the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), which declares inter alia that states shall consult with and obtain the free, prior, and informed consent of indigenous communities before making any decision affecting their lands. 117 “UNDRIP represents a shift away from the [state-centered] approach [of indigenous rights], promoting a more inclusive and consultative relationship with indigenous people.”118

This initiative to develop a system of safeguards specific to indigenous communities consumed over two decades of negotiation because states were wary of adopting new standards that would preserve an indigenous right of self-determination and be a key part of the decision-making process concerning the use of their lands and the natural resources contained therein. 119 Nevertheless, UNDRIP was adopted by the United Nations Human Rights Council in June 2006. 120 Unlike ILO

117 UNDRIP, supra note 96, at art. 19.
118 JAMES CRAWFORD, BROWNLE’S PRINCIPLES OF INTERNATIONAL LAW 649 (2012).
120 Id.
169, Panama is a signatory to this declaration and is bound by its terms. 121

One of the most controversial aspects of UNDRIP is the duty of the state to obtain the free, prior, and informed consent of the indigenous community before approving any project affecting their land or resources. 122 According to one author, one of the reasons why these matters are deemed so sensitive is that, at present, one of the major threats to the physical and cultural survival of indigenous peoples lies in the increasing focus on so-called ‘under-developed regions which overlap with indigenous areas, in order to extract natural resources, establish industrial plants and build dams[].” 123

For this reason, UNDRIP’s protections create a tension between the interest of indigenous peoples and the state’s interest in economic development. 124 In fact, the concept of free, prior, and informed consent is pervasive throughout UNDRIP: “no relocation shall take place without free, prior, and informed consent;” 125 “state shall consult and cooperate in good faith...in order to obtain their free, prior, and informed consent;” 126 “states shall establish and implement, in conjunction with indigenous peoples concerned, a fair, independent, impartial, open and transparent process[.]” 127

122 UNDRIP, supra note 96, at art. 32(2).
124 See generally id.
125 UNDRIP, supra note 96, at art. 10.
126 Id. at art. 19.
127 Id. at art. 27.
Free indicates that indigenous peoples must be free from force, coercion, intimidation, or manipulation by the government or company. The term prior represents that the government must seek approval from the indigenous community prior to appropriating their land and prior to the commencement of any project affecting those lands. Informed signifies that the government must give the indigenous community all the information needed to make an informed decision. In addition, the government must provide information in a language that they can understand, through means that they can readily employ, and include access to independent information and experts on law and technical issues.

While UNDRIP provides a powerful set of protections for indigenous peoples, unlike treaties which are binding on all its parties, U.N. Declarations are a type of soft law that are not legally binding. Yet, while a state may not have a legally binding obligation, it is arguable that indigenous protections under UNDRIP may be considered customary international law, considering a substantial number of member states agree to its objectives. In addition, UNDRIP has tremendous support from member states, indigenous communities, and NGO’s who recognize the need for the human rights protections contained in the instrument. For states like Panama who are signatories to UNDRIP, it also represents to the world a moral commitment to uphold the principles of the declaration.

129 Id.
130 Id.
131 Id.
133 Id.
135 Id.
B. Panama’s Protections of Indigenous Rights

Panama is recognized as having a superior legal framework of indigenous peoples’ protections.\textsuperscript{136} As compared to neighboring countries whose legal frameworks are still developing, as a general matter, Panama’s laws reflect a commitment to indigenous territorial ownership and autonomy.\textsuperscript{137} However, even with a framework recognized as “innovative and effective, respectful of indigenous autonomy and supportive of community initiative,”\textsuperscript{138} Panama falls short by not ratifying ILO 169, a treaty that neighboring Costa Rica has already ratified.\textsuperscript{139}

Despite its commitment to indigenous peoples’ protections, Panama’s legal framework is nonetheless inadequate to ensure that indigenous rights are respected because Panama’s laws contain disparities between government authority over protected lands and indigenous rights to control their lands.\textsuperscript{140} Moreover, government conflict with indigenous peoples is commonplace.\textsuperscript{141} Enforcement of indigenous rights in Panama is weak, which allows the government to continue its abuses.\textsuperscript{142} In fact, the absence of enforcement coupled with the nation’s zealous pursuit of development enable the exploitation of indigenous lands and perpetuation of human rights abuses.\textsuperscript{143} By undermining the laws it established for indigenous protection, Panama has demonstrated indifference toward their indigenous communities, thereby contributing to the Ngäbe’s loss of territory.

For example, while Ley 10’s passage was enormous step forward, additional lands were supposed to be annexed to the Ngäbe people at a

\begin{footnotesize}
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\item \textsuperscript{136} Ortiga, \textit{supra} note 27, at 3. According to this report, countries regarded as having a “superior legal framework” possess such characteristics as a “high-level commitment” to indigenous rights marked by follow through by codification in domestic legal framework to preserve those rights and granting of land tenure rights.
\item \textsuperscript{137} See generally Ortiga, \textit{supra} note 27.
\item \textsuperscript{138} \textit{Id.}, at 8.
\item \textsuperscript{139} \textit{Id.} at 7.
\item \textsuperscript{140} Wickstrom, \textit{supra} note 3, at 45.
\item \textsuperscript{141} See generally Wickstrom, \textit{supra} note 3.
\item \textsuperscript{142} \textit{Id.} at 46.
\item \textsuperscript{143} \textit{Id.}
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later time. According to the text of Ley 10, the government was to demarcate these lands within two years of the law’s passage. To date, the lands have not been annexed to the Ngābe people. In fact, while Ley 10 appears to grant the Ngābe exclusive control over their land, controversy exists as to whether their authority extends to the natural resources located on the land.

Significant gaps in protection exist in Ley 10 because while the Ngābe possess collective ownership of the land, the Panamanian government still retains the authority to authorize its use for purposes such as hydropower projects, thereby creating a usufructuary arrangement rather than a formal titling of land. However, Article 127 of the Panama Constitution guarantees land reservation to indigenous peoples of Panama to ensure their social and economic well-being. In addition, according to Article 48, there should be no expropriation of indigenous lands outside of special proceedings in a court of law. Thus, while the government has an interest in indigenous lands, that interest is, to a certain degree, subject to indigenous rights granted by the Panamanian government.

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144 del Rosario, supra note 24, at 9.
145 Id.
146 Id.
147 Id.
148 Wickstrom, supra note 3, at 45; see also Dire Straits, supra note 7, at 13 (noting that mining is a significant threat to Ngöbe as a result of laws allowing the government to exploit natural resources).

The State guarantees to indigenous communities the reservation of necessary lands and collective property to achieve their social and economic well-being. The law shall regulate the procedures that are to be followed in order to achieve this end and its corresponding delineations, within which the appropriation of private property is prohibited.)

150 Srouji, supra note 149, at 9.
By contrast, subsequent legislation passed in Panama permits the government to exploit indigenous lands in favor of continued development. Further underscoring the severity of Panama’s indifference toward indigenous rights was the passage of Ley 18 de 2003, repealing key indigenous protections that existed in Panama Ley 41 de 1998 (Ley 41). Ley 41, Panama’s General Environmental Law, contained critical safeguards for indigenous communities that mirrored the free, prior, and informed consent provisions present in ILO 169 and UNDRIP.

However, Ley 41’s essential provisions—Articles 63, 96, 98, 101, and 102—were abolished by Ley 18 de 2003 leaving Panama’s indigenous people vulnerable to infringements on their land rights and right to self-determination. Article 63 of Ley 41 required indigenous participation in the protection and conservation of the comarca lands. Article 96 provided that Panama’s environmental authority would consult with indigenous authorities on all matters concerning the environment and natural resources on their lands. Articles 98 and 101 reinforced the requirement of consultation with the appropriate indigenous authority concerning use of comarca lands for industrial or commercial purposes. Article 102 stipulated that lands within the comarcas were inalienable, notwithstanding the traditional system of land conveyance within indigenous communities, and that the government can only remove indigenous peoples from their lands with their prior consent. Thus, the elimination of these critical provisions of Ley 41 in 2003 permitted concessions for projects like Barro Blanco to begin and signaled the continued expropriation of Ngäbe lands.

153 Simms & Moolji, supra note 152, at 40; see also Chronology of Events for Barro Blanco Dam (Panama), supra note 54.
154 Simms & Moolji, supra note 152, at 40.
155 Id.
156 Id.
III. THE KYOTO PROTOCOL’S CLEAN DEVELOPMENT MECHANISM

The hydropower projects mentioned in this article were initiated under the Clean Development Mechanism (CDM) of the Kyoto Protocol.\footnote{See ACD Comments, supra note 57; see also Project 3237, supra note 17.} The CDM seeks to promote sustainable development; however, what was established to provide a sustainable solution to climate change has inadvertently created an environmental regulatory framework that leaves indigenous communities vulnerable to the objectives of host countries and developers.\footnote{See generally Randall Spalding-Fecher, et. al., Assessing the Impact of the Clean Development Mechanism 48 (2012) available at http://www.cdmpolicydialogue.org/research/1030_impact.pdf (last visited May 19, 2014).}

A. The Clean Development Mechanism Framework

In 1997, responding to the deficiencies of provisions for emission reductions in the UNFCCC, the states adopted the Kyoto Protocol to strengthen the global response to climate change.\textsuperscript{162} Panama is a party to the Kyoto Protocol and is classified as a Non-Annex I developing country.\textsuperscript{163} The Kyoto Protocol is the vehicle through which the goals of the UNFCCC are realized.\textsuperscript{164} “It commits industrialized countries to stabilize greenhouse gas emissions based on the principles of the Convention. The Convention itself only encourages countries to do so.”\textsuperscript{165} Under the Kyoto Protocol countries are required to meet emissions reduction targets by pre-established “commitment periods” through any of three market-based mechanisms: International Emissions Trading, Joint Implementation, and Clean Development Mechanism.\textsuperscript{166}

The principle goals of the Kyoto Protocol mechanisms are to stimulate sustainable development through technology transfer and investment, help countries with Kyoto commitments to meet their targets by reducing emissions or removing carbon from the atmosphere in other countries in a


\textsuperscript{165} Id. [emphasis added]; see Kyoto Protocol, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/kyoto_protocol/items/3145.php (last visited May 15, 2014) (listing the target regulated gases under the Kyoto Protocol as: carbon dioxide (CO\textsubscript{2}), methane (CH\textsubscript{4}), nitrous oxide (N\textsubscript{2}O), hydrofluorocarbons (HFC’s), perfluorocarbons (PFC’s); and sulphur hexafluoride (SF\textsubscript{6}); see also Kyoto Protocol, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/kyoto_protocol/items/2830.php (last visited May 15, 2014) (“recognizing that developed countries are principally responsible for the current high levels of GHG emissions in the atmosphere as a result of more than 150 years of industrial activity, the Protocol places a heavier burden on developed nations under the principle of ‘common but differentiated responsibilities.’”).

cost-effective way, and to encourage the private sector and developing countries to contribute to emission reduction efforts.167

These mechanisms have created what is known as the carbon market driven in part by the CDM, which involves “investment in sustainable projects that reduce emissions in developing countries.”168

Created by Article 12 of the Kyoto Protocol, the CDM allows countries with emission-reduction or emission-limitation mandates under the Kyoto Protocol to undertake an emission-reduction project in developing countries (like Panama).169 For every ton of carbon dioxide (CO2), the projects can earn certified emission reduction (CER) credits, which the countries can sell and also count towards meeting their targets under the Kyoto Protocol.170 In short, it forms a cap and trade system designed to encourage climate change mitigating projects in exchange for credit, thereby creating tangible assets with market value.171

The Conference of the Parties to the Kyoto Protocol has full authority over and makes rules and regulations concerning the CDM.172 An Executive Board supervises the CDM, and is responsible for

168 Id.
170 Id.
171 YAMIN & DEPLEDGE, supra note 161, at 160; see also James Salzman & J.B. Ruhl, Currencies and the Commodification of Environmental Law, 53 STAN. L. REV. 607, 616 (2000), defining “cap and trade” as a market-based emissions reduction approach by which desirable levels of aggregate emissions are established for certain pollutants. Regulators determine a formula for allocation of acceptable emissions levels among emitters and issue permits to emitters entitling them to emit a given quantity of that pollutant. The desired effect is that the total quantity of emissions allowed equals the maximum level set by policymakers thereby causing emitters to lower their emissions.
overseeing all activities related to the CDM. Although the Executive Board maintains separate panels to assist in CDM operations and ministerial functions, it remains fully accountable to the Conference of the Parties (COP). The CDM Modalities and Procedures, which govern the CDM, sets forth the rules and procedures by which the COP and Executive Board will approve and regulate CDM projects.

B. The CDM Project Cycle

There are seven steps in the project cycle of a CDM initiative: (1) project design preparation and submission of the proposed project; (2) national approval from the host country; (3) validation from a private third-party certifier; (4) registration of the project once accepted by the Executive Board; (5) monitoring actual emissions; (6) verification and certification that actual emissions reduction took place; and (7) issuing the CER credit. During steps one through four, the planning phase, the project participant must meet three substantive requirements for the Designated Operational Entity to submit the project to the Executive Board for registration—a letter of approval from the Designated National Authority of the host country, the Project Design Document, and a validation report from the Designated Operational Entity.

173 Id.; see also YAMIN & DEPLEDGE, supra note 161, at 166.
174 See Governance, supra note 172.
177 Id.; see also Designated National Authorities, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://cdm.unfccc.int/DNA/index.html (last visited May 15, 2014) (according to the UNFCCC, the Designated National Authority, a requirement for participation in the CDM, is an organization responsible for approving CDM projects on behalf of party States and whose primary function is to determine whether the project will assist the host party in meeting their sustainable development goals. In addition, the DNA submits a letter of approval along with their submission stating that the host country
The development of the Project Design Document requires certain information be included within the document and submitted to the Designated Operational Entity (DOE)—particularly, a description of the environmental impacts of the project and a summary of stakeholder comments. The CDM Modalities and Procedures require the project participants consult with stakeholders during the planning phase as part of the Project Design Document (PDD) and it must occur in order for a project to be validated. The manual specifies that project participants must request stakeholder comments, provide the stakeholder comments to the Executive Board, and include an explanation of how the project accounts for those comments. However, the manual does not specify

has ratified the Kyoto Protocol, its participation is voluntary, and that the project contributes to sustainable development."

"Stakeholders" means the public, including individuals, groups or communities affected, or likely to be affected, by the proposed clean development mechanism project activity. CDM Modalities & Procedures, supra note 175, at § P 1(e). The CDM also requires that projects meet the requirement of additionality during the validation phase. The text of Article 12 § 5(c) of the Kyoto Protocol requires “reductions in emissions [to be] additional to any that would occur in the absence of the certified project activity.” This simply means that GHG emissions, after implementation of the project, must be lower than those that would have occurred in the absence of the new project—it must not be “business as usual;” see generally Barbara Haya and Payal Parekh, Hydropower in the CDM: Examining Additionality and Criteria for Sustainability, (Energy and Resources Group Working Paper ERG-11-001, 2011), available at http://www.indiaenvironmentportal.org.in/files/file/Haya%20Parekh-2011-Hydropower%20in%20the%20CDM.pdf (last visited May 19, 2014) (demonstrating that hydropower projects (large and small) backed aggressively by host countries are common and as a result fail to meet the additionality standard). Article 12 § 5(c) of the Kyoto Protocol requires “reductions in emissions [to be] additional to any that would occur in the absence of the certified project activity.” This simply means that GHG emissions, after implementation of the project, must be lower than those that would have occurred in the absence of the new project—it must not be “business as usual.” Barbara Haya & Payal Parekh, Hydropower in the CDM: Examining Additionality and Criteria for Sustainability, (Nov. 2011), available at http://erg.berkeley.edu/working_paper/2011/Haya%20Parekh-2011-Hydropower%20in%20the%20CDM.pdf (last visited May 19, 2014). Although lack of additionality presents another issue for indigenous peoples, an in-depth discussion of that issue is outside the scope of this article.
how the project participant should elicit stakeholder comments and what measures are sufficient to meet this requirement.\footnote{CDM Modalities & Procedures \textit{supra} note 175, at § P 37(b).}

The stakeholder commenting period is thirty days from the date of the PDD’s posting on the CDM website.\footnote{\textit{CDM Project Cycle}, CARBON Mkt. WATCH, http://carbonmarketwatch.org/learn-about-carbon-markets/cdm-project-cycle/ (last visited May 15, 2014).} During this brief period, indigenous peoples and other affected parties are required to voice their concerns or disapproval of the proposed project.\footnote{\textit{Id.}} Yet, the project participant is only required to post the PDD in English, and there is no guarantee that indigenous people are even aware that the PDD is available for review since most, if not all, do not have access to the internet.\footnote{Public Participation in the CDM, CARBON Mkt. WATCH, http://carbonmarketwatch.org/category/sustainable-development/public-participation/ (last visited May 15, 2014).}

During validation, an independent evaluation of the project is measured against CDM requirements as set forth in the CDM Modalities and Procedures and any relevant Kyoto Protocol and Executive Board decisions.\footnote{CDM Modalities & Procedures \textit{supra} note 175, at § P 37 (g).} Furthermore, the evaluator should verify, among other things, that the stakeholder consultation requirement was actually met.\footnote{\textit{Id.}} Once validation is completed—and if the project complies with the CDM Modalities and Procedures—the Executive Board accepts the project and registers it as a CDM project.\footnote{\textit{Id.}}

The CDM Validation and Verification Manual requires the DOE to assess the steps taken by the developer to notify stakeholders, but it fails to provide explicit instruction to the DOE as to what steps are adequate and appropriate.\footnote{See Exec. Bd. of the Clean Dev. Mechanism, Fifty-Fifth Meeting Report, Annex 1, Clean Development Mechanism Validation and Verification Manual, Version 05.0, § 7.14. (Feb. 1, 2013) [hereinafter VVM], \textit{available at} http://cdm.unfccc.int/filestorage/e/x/t/extfile-20131010181547796-accr_stan02.pdf?t=cDJ8bjQxbWxofDD8SNKUjd2BjlqNP7lv7I3 (last visited May 15, 2014).} In fact, the manual indicates that the DOE must
determine whether the project participants invited stakeholder comments through document review and interviews when appropriate. However, the instructions are silent as to how far the DOE must go in making this determination since the manual also states that the DOE is not required to communicate with the stakeholders who comment; though, the DOE must account for their comments in its report.

After the project passes validation, it is then subject to ongoing monitoring of actual emissions and an additional verification, which is an independent review and determination that any GHG reductions are authentic; then, once verification is complete, the project is certified. To verify authenticity, the reviewer uses a combination of tools, which includes “conduct[ing] on-site inspections, as appropriate, that may comprise, inter alia, a review of performance records, interviews with project participants and local stakeholders . . .” Although, the reviewer may contact local stakeholders, there is no requirement that they do because the main focus of this verification process is to ensure that carbon reductions occurred, not to ensure compliance with domestic and international law or to hear indigenous concerns regarding violation of their rights. Moreover, once a project is registered, there is no means to de-register a project that violates international or domestic law. Therefore, it is imperative that stakeholders have a voice early in the CDM project cycle to prevent a project that violates human rights from going forward.

Once the project participant receives certification, they may then submit a request for issuance of the CER credit, which is also subject to an additional verification-type procedure. Yet even within these processes, there is no assurance that indigenous voices will be heard.

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visited May 19, 2014) s. (outlining the DOE’s steps in validation that local stakeholder consultation took place).

191 Id. at 7.14, 7.5.
192 Id. at 7.14, 7.5.
193 CDM Project Cycle, supra note 176.
194 CDM Modalities & Procedures, supra note 175, at § P 62 (emphasis added).
195 Id.
196 UN Special Rapporteur, supra note 10.
197 CDM Project Cycle, supra note 176.
fact, the CDM project cycle does not contain a complaint mechanism, leaving a significant void for the defense of human rights.\textsuperscript{198} Although an appeals process currently exists, it is only open for the purpose of appealing denial of registration and is narrowly applied.\textsuperscript{199} The appeals process only extends to certain participants like the project developers and does not include indigenous groups or their advocates wanting to appeal the registration of a project for human rights violations.\textsuperscript{200} Consequently, once a project has officially been registered under the CDM, the possibility of indigenous voices being heard is effectively foreclosed without access to justice built into the project cycle.

\textbf{IV. PROPOSAL TO ENHANCE INDIGENOUS RIGHTS UNDER THE CDM}

Since domestic protections are weak and international protections have gone unheeded, adding enhanced accountability measures to the CDM Modalities and Procedures will help protect indigenous communities. Procedural safeguards can effectively mitigate the harm caused to indigenous peoples by placing roadblocks to registration if states and developers do not adhere to legal protections. Additionally, in order to provide a voice to the public at large, an access to justice mechanism available throughout the CDM project cycle would provide an additional layer of accountability that does not currently exist. Finally, the inclusion of indigenous knowledge during a project’s planning phase could provide valuable solutions thereby assisting the host country in meeting its needs while respecting indigenous rights.

\textsuperscript{198} UN Special Rapporteur, supra note 10.
\textsuperscript{200} Id.; see also Kylie Wilson, Access to Justice for Victims of the International Carbon Offset Industry, 38 ECOLOGY L.Q. 967, 1025 (2011) (discussing the unilateral CDM appeals process and how stakeholders and NGO’s are basically excluded from this process based on its structure).
A. Develop Validation, Verification, and Certification Safeguards

The hydropower projects addressed in this article were registered under the CDM. While there are several factors at play when choosing a host country, the most important determinant should be the country’s mitigation potential as this forms the basis for the award of CER credits.201 Nevertheless, as a small developing nation with relatively small mitigation potential, Panama has benefitted greatly from the CDM as an attractive host country because it has a very good investment climate.202

In addition, the revenue generated by CDM-registered projects provides a major incentive to host countries such as Panama to aggressively advance hydropower projects like Barro Blanco.203 Despite the international and domestic protections discussed earlier in this article, Panama has disregarded the Ngäbe right of self-determination in favor of modernization by failing to adequately consult the Ngäbe regarding the Barro Blanco and other projects.204 Their actions have placed the Ngäbe in jeopardy of losing their land and culture; therefore, measures must be taken to strongly discourage any further expropriation of Ngäbe lands.205

Contrary to UNDRIP, Panama failed to engage the Ngäbe with regard to the Barro Blanco project.206 According to an indigenous leader

203 Dire Straits, supra note 7, at 7; see also Gordon, supra note 202, at 164.
204 Groups, supra note 18.
205 It should be noted that according to the OHCHR, Panama expressed a commitment to cooperating with the procedures of the United Nations during Mr. Anaya’s visit. In addition, as part of their indigenous protections, Panama’s National Assembly approved a draft of legislation creating a Vice-Ministry for Indigenous Affairs, overseeing the “planning, direction and coordination of strategies” for Panama’s indigenous peoples. See Human Rights Council holds Interactive Dialogue on Rights of Indigenous Peoples, OFFICE OF THE HIGH COM’R FOR HUMAN RIGHTS, (Sept. 18, 2013), http://www.ohchr.org/en/NewsEvents/Pages/DisplayNews.aspx?NewsID=13741&LangID=E (last visited May 15, 2015).
206 John Ahni Schertow, UN Representative on Indigenous Peoples Asked to Investigate Human Rights Violations Caused by Panama’s Barro Blanco Dam, IC MAGAZINE, (June 18, 2013), http://intercontinentalcry.org/un-representative-on-indigenous-peoples-asked-
of M10, the Ngäbe were not consulted about the Barro Blanco dam prior to its approval.\textsuperscript{207} Moreover, the Ngäbe were not invited to a public forum to discuss the dam. Of the people who were consulted, none was Ngäbe or even representatives of Ngäbe interests.\textsuperscript{208} Ngäbe resistance to these projects has often been met with violence from the local government.\textsuperscript{209} The Barro Blanco and other hydroelectric projects (Tabasara I and Chan 75) were all approved without prior consultation as required by UNDRIP.\textsuperscript{210} Thus, Panama failed to meet the standard of free, prior, and informed consent as set forth in UNDRIP and, as a result, the Ngäbe have suffered tremendously in furtherance of Barro Blanco’s construction.\textsuperscript{211}

To assist in preventing future human rights abuses, there are a few areas in the validation process where precautionary measures, if taken, would simultaneously preserve indigenous rights and provide economic feasibility to host countries and developers. First, mandating compliance with international and domestic law as a prerequisite for registration under the CDM would add a human rights dimension to the process that does not currently exist. This type of enhancement has been referred to as a \textit{rights-based approach} to climate change mitigation and is strongly advocated for by top scholars.\textsuperscript{212} In fact, the World Bank has recognized the role human rights play in development and that their policies should

\textsuperscript{190} to-investigate-human-rights-violations-caused-by-panamas-barro-blanco-dam/ (last visited May 19, 2014).
\textsuperscript{207} Id.
\textsuperscript{208} Id.; see also Swyter, supra note 19.
\textsuperscript{209} See Swyter, supra note 11 (reporting that two Ngäbe residents were killed by police during a protest blocking the entrance to the Barro Blanco dam).
\textsuperscript{210} See ACD Comments, supra note 57 (stating that AES did not properly consult the Ngäbe on the Chan 75 dam); see generally Chronology of Events for Barro Blanco Dam (Panama), supra note 54; see also Letter from Danielle Hirsch, Director, Both ENDS to Mr. Nanno Kleitorp, Director FMO (Oct. 25, 2013), available at http://carbonmarketwatch.org/wp-content/uploads/2013/06/131025_FMO-N.-Kleiterp_FMO-support-for-Barro-Blanco_FINAL.pdf (last visited May 19, 2014) (urging FMO to revoke financing for Barro Blanco from GENISA because GENISA did not properly consult the Ngäbe, which contravened FMO’s policy not to infringe on human rights).
\textsuperscript{211} Id.
consider human rights as part of its decision-making process.丽考, allowing human rights to inform the CDM approval process would make great strides in advancing the cause of indigenous peoples all over the world.

As part of the planning phase of the project, DOE should be required to conduct an in-depth analysis of existing international and domestic laws implicated by the proposed project. This proposed review is similar to the DOE’s already-required review of the project against CDM requirements as set forth in the CDM Modalities and Procedures and any relevant Kyoto Protocol and Executive Board decisions.

Conformity with international conventions and relevant domestic law is essential for indigenous communities to receive a meaningful opportunity to preserve their lands. It has been suggested that project developers include a statement that the project is not the subject of any adverse decision of domestic or international courts when submitting a project for validation. While this measure could make some impact on registration, by having project developers supply the information it places the burden on the participant—who has a pecuniary interest in registration of the project—rather than requiring this step to be included in the DOE’s independent review.

Second, effectively defining the scope of stakeholder consultation would ensure that indigenous groups and other concerned parties such as NGO’s receive adequate consultation and have a meaningful opportunity to participate in any development affecting indigenous lands. The CDM Modalities & Procedures and the Validation and Verification Manual do not define the scope of stakeholder consultation with specificity; thus the lack of clearly delineated consultation procedures for such a significant and crucial step in the CDM process marks a blatant weakness in the

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214 Wilson, supra note 200, at 1022.
guidelines of the CDM that demands immediate consideration and revision. The lack of procedures governing stakeholder consultation essentially grants host countries and developers carte blanche in the CDM project cycle that stakeholders cannot challenge effectively because specific instructions for adequate stakeholder consultation do not exist. Conversely, host countries and developers are susceptible to ensuing litigation resulting from the absence of clear consultation guidelines.

Finally, expanding the thirty-day stakeholder commenting period to include a notice period prior to commencement of the commenting period and requiring that project participants post PDD’s in the languages of the host country and affected indigenous communities would add an extra layer to the stakeholder consultation requirement prior to validation. Imposing a mandate requiring that project developers provide sufficient proof that affected stakeholders actually received notification would require project developers to employ more than one tool to adequately notify indigenous communities and their supporters of a potential project. Other means of contact should include hand delivery of the PDD to representatives of the indigenous community and notification by way of e-mail and certified mail to supporting organizations. Additionally, failure to substantiate actual notice to affected stakeholders would halt validation, thereby placing another roadblock to registration until project developers comply. To developers, project suspension could result in increased construction charges and costly project delays; however, it also provides an important budgetary safeguard for developers as they receive some level of assurance that so long as they are in compliance their projects will not be hindered.

B. Incorporate an Access to Justice Mechanism into the CDM Project Cycle

In addition to adding more defined and closely scrutinized prerequisites to registration, there must also be access to justice for indigenous communities and other affected parties seeking to register complaints against CDM project participants who violate human rights. If human rights violations associated with a CDM project are disregarded

\footnote{Id.}
pre-registration, post-registration, or at any point in the project cycle, under the current structure, indigenous peoples have no way to ensure that these violations will be addressed or that violators are subject to adverse action such as sanctions or de-registration of their projects.

As previously discussed, Barro Blanco has already been registered under the CDM and, consequently, since the Ngäbe have no alternative means of recourse, they resorted to organized demonstrations to express their dissent, which has led to bloodshed and death when law enforcement acted to silence their outrage. Without a mechanism to register complaints, the CDM project cycle renders indigenous peoples like the Ngäbe vulnerable to human rights abuses because host countries and developers are free to continue their practices with no accountability or consequences for their actions. Several organizations have petitioned for this enhancement to the CDM project cycle and for revision of the CDM Modalities and Procedures to include access to justice, yet no affirmative measures have been taken to ensure that indigenous voices are heard post-registration.

Making continued registration contingent on continued compliance with international and domestic law provides a powerful backdrop of security for indigenous peoples so that communities like the Ngäbe would not be forced to resort to protests as their only avenue to voice complaints. In furtherance of the right of self-determination present in UNDRIP, it is essential that indigenous groups have unlimited access to opportunities to legally defend their rights when infringed upon by the government or other actors.

C. Harnessing Indigenous Knowledge as a Means of Inclusion and Participation

Indigenous peoples are known to be responsible stewards of their land, which “reflects a distinctive land ethic” separate from and superior to

217 Swyter, supra note 11; see also Panama 2012 Human Rights Abuses, 2013 WL 1884347.

218 Groups, supra note 18; see also Submission on Views Regarding Human Rights in the Revision of the CDM Modalities and Procedures, supra note 215.
the modern view of land as a commodity. Building on this environmental ethic, harnessing indigenous knowledge of the environment is a way in which states and developers can invite the participation of indigenous communities in land development projects that concern the nation’s population at large, while remaining sensitive to the surrounding indigenous culture and responsibly developing solutions to the nation’s problems.

While hydropower projects appear to alleviate Panama’s electricity concerns, they simultaneously destroy the surrounding ecosystem, displace indigenous communities, and have been initiated without indigenous consultation and consent, which severely undermines their right to self-determination. Additionally, though international and domestic law mandate respect for indigenous lands, indigenous rights in Panama have been outweighed by Panamanian interest in the Panama Canal’s expansion and other prospects of Panama’s continued modernization and economic prosperity.

Despite the popularity of hydropower in Panama, research has uncovered instances of indigenous knowledge contributing to the implementing of wind energy as an alternative to hydropower. As repositories of environmental knowledge, indigenous communities in countries such as the United States have been able to work together with the government and developers to institute projects that would accomplish

220 According to leading scholar Maxine Burkett, indigenous environmental knowledge is a term "used to describe a system of knowledge, practice, and belief that describes the relationship of living beings and their environment." Professor Burkett adds that indigenous peoples develop environmental knowledge through experiential learning; the knowledge itself is rooted in the land making it "dynamic and diverse" and is, therefore, "holistic." Maxine Burkett, Indigenous Environmental Knowledge and Climate Change Adaptation, in CLIMATE CHANGE AND INDIGENOUS PEOPLES: THE SEARCH FOR LEGAL REMEDIES 100-101 (2013).
221 Gordon, supra note 202, at 165.
the nation’s objectives while preserving the indigenous group’s culture and way of life. In fact, the Cree Nation of Canada created *Voices from the Bay*, an indigenous knowledge study, which memorializes in writing, indigenous environmental practices and is relayed to policy-makers and scientists as part of environmental assessments conducted in the area. Initiatives advanced by indigenous groups have also received recognition and won prizes for innovation. Examples such as these are illustrative of the valuable contributions indigenous people add to climate change mitigation efforts because of their ancient connection to their land. Moreover, because of these connections, they are able to ensure their continued survival, thus preserving their culture.

In a recent report, Mr. S. James Anaya, United Nations Special Rapporteur on the Rights of Indigenous Peoples, suggested that the inclusion of indigenous knowledge and enterprise furthers the indigenous right to self-determination by allowing the communities to determine the most beneficial means of development and management of natural resources. Accordingly, adding this dimension as a crucial part of the consultation process could produce thoughtful, innovative, and even traditional methods of resolving climate change mitigation issues.

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223 See, eg. id. (providing an example of the Navajo Nation in the southwest United States who are conducting feasibility studies to determine the impact on tribal lands and its potential for community revitalization while reducing carbon emissions); see Kirsty Galloway McLean, *Advance Guard Climate Change Impacts, Adaptation, Mitigation, and Indigenous Peoples* 19-20 (2010), available at http://www.unutki.org/downloads/File/Publications/UNU_Advance_Guard_Compendium_2010_final_web.pdf (last visited May 19, 2014) [hereinafter *Advance Guard*] (detailing examples in Columbia, Kenya, and Indian Himalayas); see Burkett, supra note 220, at 106 (noting the profound land ethic inherent in indigenous environmental knowledge and the significance of its inclusion in discussions concerning climate change mitigation and the preservation of indigenous culture and future generations).

224 *Advance Guard*, supra note 223, at 34.


226 See Tsosie, supra note 2199, at 85.

Furthermore, inclusion of indigenous knowledge creates a partnership between the government and indigenous people that is mutually beneficial and sustainable.

Environmental activist, Raúl Montenegro stated, “[i]ndigenous peoples living on their ancestral lands can help industrialized countries by living in a sustainable manner (not the contrary). If we destroy their environments and communities, we will lose the answers they have to solving our problems, and to the protection of our common futures.”

Adding the inclusion of indigenous knowledge to the stakeholder comment and participation period would demonstrate an intentional commitment of the international community to embracing human rights and environmental preservation as their core initiative.

**CONCLUSION**

The Ngäbe’s struggle with hydropower development is not an isolated problem; other developing nations have imperiled their indigenous in pursuit of modernization. However, the Ngäbe lands are consistently targeted for development to the extent that their collective lands have diminished over time, thereby threatening their continued survival. Despite this fact, Panama moves forward with a series of hydroelectric projects that will further reduce Ngäbe lands.

Although ILO 169, UNDRIP, and domestic law mandate free, prior, and informed consent when making decisions concerning indigenous lands, Panama and Barro Blanco’s developers have disregarded this obligation since this project continues to be registered under the CDM. Thus, while international and domestic indigenous protections are paramount to establishing the rights of indigenous people, enhancing the CDM project cycle with procedural safeguards provides a fail-safe approach to protecting those rights and preserving indigenous culture.

Specifically defining the scope of stakeholder consultation and expanding the thirty-day commenting period would give indigenous communities like the Ngäbe an equitable opportunity to voice any

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concerns about or disagreement with a project affecting their territories. Moreover, access to justice must be available during the planning phase of the project. Indigenous people are fully capable of determining what is in their best interests for their continued survival. To that end, any project not achieving this goal must yield to indigenous rights so as not to trample them.

Although this article advocates on behalf of indigenous peoples’ rights, the solutions proposed in this article would not benefit indigenous communities alone. Placing procedural safeguards early in the CDM process would allow developers and states to avoid cost overruns due to halted projects and costly litigation. Also, enhancing consultation and participation measures to include indigenous knowledge fosters a community of inclusion, mutual respect, and collaboration, ensuring climate change mitigation efforts are met in a responsible manner. Accordingly, these remedies would not only add increased credibility to the registration process, but would establish accountability measures that would safeguard human rights and ensure the viability of sustainable projects.