

2020

Making the Case for a Right to a Healthy Environment for the Protection of Vulnerable Communities: A Case of Coal-Ash Disaster in Puerto Rico

Sarah Dávila-Ruhaak
UIC John Marshall Law School

Follow this and additional works at: <https://repository.law.umich.edu/mjeal>



Part of the [Environmental Law Commons](#), [Human Rights Law Commons](#), and the [Social Welfare Law Commons](#)

Recommended Citation

Sarah Dávila-Ruhaak, *Making the Case for a Right to a Healthy Environment for the Protection of Vulnerable Communities: A Case of Coal-Ash Disaster in Puerto Rico*, 9 MICH. J. ENVTL. & ADMIN. L. 379 (2020).

Available at: <https://repository.law.umich.edu/mjeal/vol9/iss2/4>

<https://doi.org/10.36640/mjeal.9.2.protection>

This Article is brought to you for free and open access by the Journals at University of Michigan Law School Scholarship Repository. It has been accepted for inclusion in Michigan Journal of Environmental & Administrative Law by an authorized editor of University of Michigan Law School Scholarship Repository. For more information, please contact mLaw.repository@umich.edu.

MAKING A CASE FOR THE RIGHT TO A HEALTHY ENVIRONMENT FOR THE PROTECTION OF VULNERABLE COMMUNITIES: A CASE OF COAL-ASH DISASTER IN PUERTO RICO

*Sarah Dávila-Ruhaak**

ABSTRACT

The connection between the environment and human rights is not a surprising one. The enjoyment of human rights depends on a person's ability to live free from interference and to have his or her rights protected. The interdependence of human rights and the protection of the environment is manifested in the full and effective enjoyment of the right to a healthy environment. This article argues that in order to protect vulnerable persons and communities facing environmental harm, a human rights framework—specifically the right to a healthy environment—must be applied. A human rights approach complements environmental justice work, recognizing that individuals and communities affected by environmental harm are rights-holders entitled to protection. Such communities are left out of important decisions about their environment and the effect of environmental harm in their lives. Individuals most vulnerable to environmental harm are often members of poor, rural, and disenfranchised communities. The destruction of the environment disproportionately affects these communities, preventing them from accessing basic natural resources, clean water and sanitation, adequate housing, food security, and access to health and medical assistance. Additionally, intersecting forms of discrimination exacerbate exclusion and marginalization. A human rights approach to environmental justice emphasizes the need to protect affected communities and holds the State responsible for recognizing their vulnerability and providing heightened protection. This article seeks to show that while the human right to a healthy environment has not been widely recognized, a robust juridical framework enables environmental justice advocates and affected communities to vindicate the rights of vulnerable communities. The case study of coal-ash contamination in Puerto Rico and the harms suffered by affected communities there anchors the argument for why advocates should use a human rights framework to protect the rights of the most vulnerable. The case of Puerto Rico is illustrative of so many

* Sarah Dávila-Ruhaak is an Assistant Professor of Law and Director of the International Human Rights Clinic at the UIC John Marshall Law School. She wants to thank Professor Richard Wilson, Professor of Law Emeritus from American University Washington College of Law and former Acting Dean for Clinical Education and Visiting Professor of Law at The John Marshall Law School, for deepening her thinking of international human rights law and his invaluable feedback. She also wants to thank Professor Hugh Mundy, Associate Professor of Law at the UIC John Marshall Law School, who meticulously read the article and provided tremendous feedback. Lastly, she wants to thank former research assistants Jonnsebastian Orozco and Toni Falligant for their invaluable support.

poor, disenfranchised, and vulnerable communities around the world, affected by environmental harm and in need of a human rights-based framework.

TABLE OF CONTENTS

| | |
|--|-----|
| ABSTRACT..... | 379 |
| INTRODUCTION | 381 |
| I. HUMAN RIGHTS AND THE ENVIRONMENT ARE INEXTRICABLY CONNECTED | 384 |
| II. ORIGINS OF THE RIGHT TO A HEALTHY ENVIRONMENT AND ITS GLOBAL RECOGNITION | 387 |
| III. THE RIGHT TO A HEALTHY ENVIRONMENT AND ITS SUBSTANTIVE PROTECTION..... | 390 |
| A. <i>Vulnerable Populations in Need of Special Protection in Relation to their Right to a Healthy Environment</i> | 394 |
| 1. Protecting Indigenous, Traditional, or Other Disenfranchised Communities | 395 |
| 2. Protecting Women and Reproductive Health | 397 |
| 3. Protecting Vulnerable Children | 398 |
| 4. Protecting Environmental Human Rights Defenders and Others Working to Protect the Environment | 403 |
| B. <i>Freedom from Discrimination and Equal Treatment of Disenfranchised or Vulnerable Communities</i> | 405 |
| IV. THE PROCEDURAL PROTECTIONS OF THE HUMAN RIGHT TO A HEALTHY ENVIRONMENT | 408 |
| A. <i>Right to Seek, Receive and Impart Information on Environmental Matters</i> | 408 |
| B. <i>Taking Part and Exercising Autonomy</i> | 411 |
| C. <i>Effective Remedies for Vulnerable Persons, Including Children, Girls, and Women of Reproductive Age, and Others in the Community</i> | 415 |
| V. CASE STUDY: PROTECTING THE HUMAN RIGHTS OF PUERTO RICANS SUFFERING FROM ENVIRONMENTAL HARM RESULTING FROM EXPOSURE TO COAL-ASH | 416 |
| CONCLUSION | 431 |

We are fierce women that are fighting for our families' health. They will not touch our families. This has to stop, and if something bad happens at the end, it is the government's responsibility because they are pushing us I feel very proud of defending my community, my health, and my family We are here. I have been here since the Gasoducto. We fought back then, with my partners, and we just have to defend from everything that we believe will hurt us and our community.¹

INTRODUCTION

Puerto Ricans have faced environmental disaster as a result of improper disposal and mismanagement of coal-ash, compounding vulnerability, powerlessness, and humanitarian disasters. Responding to these crises, Puerto Ricans have struggled to be heard and to protect their communities, health, livelihood, autonomy, and dignity. Beginning in the 1960s, and particularly from the 1990s to the present, rural and low-income communities in Puerto Rico have been persistently exposed to life-threatening chemicals and pollutants from coal-based power plants and oil refineries. Most recently, a private American energy company, Applied Energy Systems (AES), received contracts to provide electricity to Puerto Rico for 25 years.² These contracts were negotiated and consummated without the completion of environmental impact assessments, in violation of the rights to information and participation.

Through the production of coal-based energy, AES has disposed toxic coal-ash into the air, throughout agricultural lands, and near critical water sources.³ The company also produces Agremax, a "secondary" use product from coal-ash used in

1. Sarah Vázquez, *Lucha Contra Las Cenizas de Carbón Tiene Rostro de Mujer*, METRO P.R. (Aug. 3, 2017), <https://www.metro.pr/pr/noticias/2017/08/03/lucha-contra-las-cenizas-de-carbon-tiene-rostro-de-mujer.html> (translation by author).

2. The parties present in the Committee for "Cogeneración y generación de energía" included Junta de Planificación, Autoridad de Acueductos y Alcantarillados, Autoridad de Energía Eléctrica, Junta de Calidad Ambiental, Compañía de Fomento Industrial, Autoridad de Desperdicios Sólidos, Departamento de Recursos Humanos, y el Departamento de Energía Federal, Banco Gubernamental de Fomento, y Departamento de Recursos Naturales. COMITÉ DE COGENERACIÓN Y GENERACIÓN DE ENERGÍA, POLÍTICA PÚBLICA ENERGÉTICA DE PUERTO RICO i, (1993) [hereinafter COMITÉ DE COGENERACIÓN]; Power Purchase & Operating Agreement between AES Puerto Rico, L.P. and Puerto Rico Electric Power Authority (Oct. 11, 1994), <https://aeepr.com/es-pr/QuienesSomos/AES/Contrato%20AES.pdf> [hereinafter AES Agreement].

3. Omar Alfonso, *Toxins from AES's Ashes are Contaminating Groundwater in Puerto Rico*, CENTRO DE PERIODISMO INVESTIGATIVO (Mar. 15, 2018), <http://periodismoinvestigativo.com/2018/03/toxins-from-aess-ashes-are-contaminating-groundwater-in-puerto-rico/>; Letter from Judith A. Enck, Reg'l Adm'r, Env'tl. Prot. Agency, to Pedro Nieves Miranda, Chairman, Junta de Calidad Ambiental de P.R. (Nov. 7, 2011), <http://www.miprv.com/wp-content/uploads/2012/09/Agremax.pdf>.

construction materials.⁴ Community members in the southern and southeast regions of Puerto Rico have suffered serious health conditions as a result, including cancer, birth defects, and cardiovascular and respiratory diseases.⁵ The persistent exposure of the local population to these harmful chemicals represents serious violations of environmental and human rights.

Persistent exposure to coal-ash and its toxic chemical compounds is a violation of the human right to a healthy environment, as well as other interrelated rights, such as the rights to life, health, and an adequate standard of living. Communities in Puerto Rico have continuously sought to enforce local ordinances prohibiting the use of Agremax and the disposal of coal-ash into the air, ground and water.⁶ Further, the right to effective participation in decision-making processes is an important procedural safeguard in this area. The general public and affected communities have been deprived of full and accurate information about AES' actions, including the true extent of the contamination and its health effects, in violation of their procedural rights.

The coal-ash disaster in Puerto Rico illustrates the persistent environmental justice struggle facing marginalized communities.⁷ Scholars and commentators disagree about the best doctrinal approach to environmental justice, with some arguing for the application of a human rights perspective.⁸ Examples like the coal-ash

4. Cynthia Burgos Alvarado, *10 Things You Should Know About Agremax and Its Use in Puerto Rico*, CARIBBEAN BUS. (July 17, 2017), <https://caribbeanbusiness.com/10-things-you-should-know-about-agremax-and-its-use-in-puerto-rico/>.

5. See Ethan Goemann, *Surveying the Threat of Groundwater Contamination from Coal Ash Ponds*, 25 DUKE ENVTL. L. & POL'Y F. 427 (2015); LISA EVANS ET AL., EARTH JUSTICE, STATE OF FAILURE: HOW STATES FAIL TO PROTECT OUR HEALTH AND DRINKING WATER FROM TOXIC COAL ASH 5-6 (2013) http://earthjustice.org/sites/default/files/StateofFailure_2013-04-05.pdf (citing U.S. ENVTL. PROT. AGENCY, HUMAN AND ECOLOGICAL RISK ASSESSMENT OF COAL COMBUSTION WASTES (Apr. 2010) (draft)). The EPA stated regulatory goal for cancer risk is 1 cancer case per 100,000 exposures. Coal ash exposure poses a 2,000 times greater risk than this goal. *Id.*

6. S.R. 1444, 25th Sen., 4th Spec. Sess. (P.R. 2016); *Confirman Inclusión del Proyecto del Senado 340 en Próxima Sesión Extraordinaria*, METRO P.R., <https://www.metro.pr/pr/noticias/2016/12/02/confirman-inclusion-proyecto-senado-340-proxima-sesion-extraordinaria.html> (last visited Jan. 31, 2020). Agremax is a product made from coal-ash that is used for "secondary purposes," such as construction, however it is also potentially extremely hazardous to human health and the natural environment. Alvarado, *supra* note 4.

7. The United States has the obligation to protect the rights of the people of Puerto Rico as a territory of the United States. See U.N. Int'l Covenant on Civil and Political Rights, Human Rights Comm., *Concluding Observations on the Fourth Periodic Report of the United States of America*, ¶ 7, U.N. Doc. CCPR/C/USA/CO/4 (Apr. 23, 2014).

8. See, e.g., Carmen Gonzalez, *Environmental Justice, Human Rights, and the Global South*, 13 SANTA CLARA J. INT'L L. 151 (2015); Rebecca Bratspies, *Do We Need a Human Right to a Healthy Environment?*, 13 SANTA CLARA J. INT'L L. 31 (2015); Susan Glazebrook, *Human Rights and the Environment*, 40 VICT. U. WELLINGTON L. REV. 293 (2009); Alan Boyle, *Human Rights or Environmental Rights? A Reassessment*, 18 FORDHAM ENVTL. L. REV. 471 (2007); Michael Burger, *Bi-Polar and Polycentric Approaches to Human Rights and the Environment*, 28 COLUM. J. ENVTL. L. 371 (2003).

disaster highlight the need to reframe the right to a healthy environment within the human rights framework.

Environmental justice work and decision-making involves a balance of competing social, economic, and environmental concerns.⁹ As detailed in this article, affected vulnerable communities that have suffered persistent environmental harm also face the most difficulty in changing environmental policy. An environmental human rights approach prioritizes the protection of the environment because of its significance to the full and effective enjoyment of human rights for affected communities. Without guaranteed participatory rights, affected communities may not be able to demand that their rights be protected and respected. A human rights framework complements environmental justice in that it recognizes that individuals and communities affected by environmental harm are rights-holders entitled to State protection. Further, a human rights framework recognizes a State's responsibility to protect its people from injuries committed by non-state actors. For those reasons, this article proposes that in order to protect the rights of vulnerable persons and communities facing environmental harm, a human rights framework, and specifically the right to a healthy environment, must be used.

This article is divided into five substantive parts. Part I discusses the connection between human rights and the environment. The recognition of the right to a healthy environment, while not an express one, has been recognized in a variety of decisions from domestic, regional, and international courts, especially in the context of indigenous rights to a healthy environment. Part II discusses the origins of the right to a healthy environment and its recognition as a substantive right. This section discusses the historical origins of the right to a healthy environment, beginning with the adoption of international environmental agreements and declarations recognizing that the protection of the environment must be anchored in an international legal system. This section establishes the link between international environmental law and foundational protections in the human right to a healthy environment. Part III discusses the substantive protections of the right to a healthy environment. This section examines the protection of vulnerable populations, such as indigenous peoples, traditional or other disenfranchised communities, women facing reproductive health challenges, children, and human rights defenders. Part IV discusses the procedural protections of the right to a healthy environment. Specifically, this section discusses the right to seek, receive, and impart information, to exercise autonomy, to be treated equally and without discrimination, and to access effective remedies for vulnerable persons and communities. This section also emphasizes the rights of human rights defenders and the importance of protecting their ability to engage in human rights defense work and advocacy. Part V presents a case study involving the protection of human rights of Puerto Ricans suffering from environmental harm resulting from exposure to coal-ash. This section discusses historical discrimination against the affected communities, and the support

9. Bratspies, *supra* note 8, at 36.

and acquiescence of the Puerto Rican government in this persistent environmental discrimination. In addition, this section describes the emergence of environmental justice movements in Puerto Rico, the catastrophic contamination by AES, and the substantive and procedural human rights violations stemming from this environmental disaster. The article concludes by emphasizing the need to incorporate a human rights legal framework to provide Puerto Rican victims of environmental harm with a rights-based framework. The incorporation of a rights-based approach is vital to protect the rights of Puerto Rican victims of environmental harm, as well as other vulnerable communities that are in need of special protection. The right to a healthy environment recognizes vulnerability to environmental harm, provides a framework of substantive and procedural rights, and emphasizes the responsibility of States to protect affected and vulnerable communities.

I. HUMAN RIGHTS AND THE ENVIRONMENT ARE INEXTRICABLY CONNECTED

The connection between human rights and the environment is not a surprising one. The enjoyment of human rights depends on a person's ability to live free from interference and to be protected. The interdependence of human rights and the protection of the environment is manifested in the full and effective enjoyment of the rights to life, highest attainable standard of physical and mental health, adequate standard of living, adequate food, clean water and sanitation, housing, culture, freedom of expression and association, information and education, participation, and effective remedies.¹⁰ The enjoyment of human rights greatly depends on the resources, services, and protections provided to communities by natural and healthy ecosystems.¹¹ Without adequate access to a healthy environment, other

10. See generally John H. Knox (Special Rapporteur on Human Rights and the Environment), *Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment*, ¶ 2, U.N. Doc. A/HRC/37/59 (Jan. 24, 2018) [hereinafter *Framework Principles*, Knox Report A/HRC/37/59 (Jan. 24, 2018)]; see *Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters* art.1, June 25, 1998, 2161 U.N.T.S. 447; African Charter on Human and Peoples' Rights (Banjul Charter) art. 24, June 27, 1981, 1520 U.N.T.S. 217 [hereinafter *Banjul Charter*]; Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights "Protocol of San Salvador" art. 11, Nov. 17, 1988, O.A.S.T.S. No. 69; Arab Charter on Human Rights art. 1 (Sept. 15, 1994); Ass'n of Se. Asian Nations, ASEAN Human Rights Declaration and Phnom Penh Statement on the Adoption of the ASEAN Human Rights Declaration art. 28, (2012); U.N Int'l Covenant on Civil and Political Rights, Human Rights Comm., CCPR General Comment No. 6: Article 6 (Right to Life), at 128 ¶ 4, U.N. Doc. HRI/GEN/1/Rev.6 (May 12, 2003).

11. John H. Knox (Special Rapporteur on Human Rights and the Environment), *Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment*, ¶ 5, U.N. Doc. A/HRC/34/49 (Jan. 19, 2017) [hereinafter *Knox Report A/HRC/34/49* (Jan. 19, 2017)].

critical aspects of a person's or community's life would be compromised or impossible.¹²

The protection of the right to a healthy environment requires environmental and development policies that incorporate the recognition of the individual and community as right-holders. Discussions among various stakeholders have clarified the need to create a space to discuss the intersection between human rights and the environment.¹³ Specifically, these discussions have raised the idea of using human rights tools to examine State protection of the right to a healthy environment.¹⁴

Domestic, regional, and international courts and tribunals have found that environmental harms can result in violations of human rights. Such violations have taken place in respect to the rights of the family and private life, the right to healthy working conditions, the right to humane treatment and freedom from torture, and the right to development.¹⁵ Legal systems that do expressly recognize a right to a healthy environment have found a host of interrelated human rights, such as the right to life, housing, food, standard of living, rights of the child, and reproductive rights, among others.¹⁶

In addition, the indigenous rights movement has anchored much of the work done to promote environmental justice within the international human rights framework.¹⁷ Indigenous movements have paved the way to understanding that human rights are interdependent and that environmental protection is inseparable from the people and communities living in the environment. Specifically, indigenous communities have fought to protect their right to make free, informed, and prior decisions about their land, natural resources and ecosystem, as well as their right to preserve the environment for future generations.¹⁸ The indigenous rights

12. *Id.* ¶ 7.

13. John H. Knox (Special Rapporteur on Human Rights and the Environment), *Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment*, ¶ 4, U.N. Doc. A/HRC/31/53 (Dec. 28, 2015) [hereinafter Knox Report A/HRC/31/53 (Dec. 28, 2015)].

14. *Id.* ¶ 18.

15. *Martínez v. Spain*, Eur. Ct. H.R., ¶¶ 40-42 (2012), <http://hudoc.echr.coe.int/eng?i=001-111833>; *see also* *San Mateo de Huanchor v. Perú*, Petition 504/03, Inter-Am. Comm'n H.R., Report No. 69/04, OEA/Ser.L/V/II.122 doc. 5 rev. (2004) [hereinafter *San Mateo de Huanchor*]; *Sawhoyamaya Indigenous Cmty. v. Paraguay*, Merits, Reparations and Costs, Judgment, Inter-Am. Ct. H.R. (ser. C) No. 146, ¶ 73(63) (Mar. 29, 2006).

16. *See* *Fadeyeva v. Russia*, 45 Eur. Ct. H.R. 10 (2005), <http://hudoc.echr.coe.int/eng?i=001-69315>; *Social and Economic Rights Action Ctr. and Ctr. for Economic and Social Rights v. Nigeria*, Communication 155/96, African Comm'n on Human and Peoples' Rights, ¶¶ 50-51 (May 27, 2002) [hereinafter *SERAC*]; *Kawas-Fernandez v. Honduras*, Merits, Reparations, and Costs, Judgment, Inter-Am. Ct. H.R. (ser. C) No. 196, ¶ 148 (Apr. 3, 2009).

17. *See* G.A. Res. 61/295, at 46, Declaration on the Rights of Indigenous Peoples (Sept. 13, 2007), https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf [hereinafter U.N. Declaration on Indigenous Peoples].

18. *See id.* at 25.

movement has also fought to protect ancestral land, religion, property, culture, health, food, housing, and to remain free from discrimination.¹⁹ Human rights movements have learned a great deal from the indigenous rights movement. Human rights advocates have also embraced a holistic view of the interconnectedness of the environment and the full and effective enjoyment of human rights.²⁰

The “greening” and mainstreaming of human rights in environmental policy across international, domestic, and local agencies is essential for the effective implementation of human rights protections. So far, the mainstreaming of human rights in environmental legal frameworks has occurred through the adoption of international agreements, declarations, guidelines, principles, and domestic legislative frameworks.²¹ The role of special rapporteurs and human rights advocates in the field of environmental rights have been complementary to the functions of United Nations specialized agencies, development agencies, regional organizations, and nongovernmental organizations that work to protect human rights in relation to environmental harm. Mainstreaming human rights and implementing environmental agreements advances several critical objectives, including: 1) collecting disaggregated data on the effects of environmental harm on vulnerable populations; 2) reporting State and private entity performance in relation to the environment; 3) encouraging reporting in a participatory manner; 4) strengthening collaborations between agencies and organizations working in the field; 5) conducting economic, social and environmental assessments; and 6) incorporating rights-based protections of affected populations in relation to the environment.²² The incorporation of a human rights legal framework to environmental justice movements focuses on the affected communities and environmental human rights defenders as right-holders. Additionally, the merging of human rights into environmental justice movements provides an advocacy tool that is focused on the human dimension

19. *Mayagna (Sumo) Awas Tingni Cmty. v. Nicaragua*, Merits, Reparations, and Costs, Judgment, Inter-Am. Ct. H.R., (ser. C) No. 79 (Aug. 31, 2001); *Ctr. for Minority Rights Dev. (Kenya) and Minority Rights Grp. Int’l (ex rel. Endorois Welfare Council) v. Kenya*, Communication 276/2003, African Comm’n on Human and Peoples’ Rights [Afr. Comm’n H.P.R.], ¶ 162 (Feb. 4, 2010), https://www.achpr.org/public/Document/file/English/achpr46_276_03_eng.pdf; *Maya Indigenous Cmty. of the Toledo District v. Belize*, Case 12.053, Inter-Am. Comm’n H.R., Report No. 40/04 (2004).

20. *See, e.g., Saramaka People v. Suriname*, Preliminary Objections, Merits, Reparations, and Costs, Judgment, Inter-Am. Ct. H.R. (ser. C) No. 172, ¶¶ 89-90 (Nov. 28, 2007); U.N. Int’l Covenant on Civil and Political Rights, Human Rights Comm., *Länsman et al. v. Finland*, CCPR/C/52/D/511/1992, ¶ 9.5 (Nov. 8, 1994).

21. *See* United Nations Env’t Programme [UNEP], *Guidelines for the Development of National Legislation on Access to Information, Public Participation and Access to Justice in Environmental Matters*, Doc. SS.XI/5 (Feb. 26, 2010) [hereinafter *Bali Guidelines*]; U.N. Conference on Environment and Development, *Rio Declaration on Environment and Development*, U.N. Doc. A/Conf.151/26/Rev.1 (Vol. I), annex I (Aug. 12, 1992) [hereinafter *Rio Declaration*].

22. Knox Report A/HRC/31/53 (Dec. 28, 2015), *supra* note 13.

of environmental work.²³ As evidenced in this article, a healthy environment is fundamental for the full enjoyment of human rights, and the exercise of human rights is, in turn, vital to the protection of the environment.²⁴

II. ORIGINS OF THE RIGHT TO A HEALTHY ENVIRONMENT AND ITS GLOBAL RECOGNITION

The right to a healthy environment has been recognized indirectly and directly since the 1970s. The Stockholm Declaration on the Human Environment (Stockholm Declaration) is one of the most important instruments of environmental protection in international law. It contains 26 principles that seek “to inspire and guide the peoples of the world in the preservation and enhancement of the human environment.”²⁵ The Declaration played a particularly influential role in the creation of a global legal framework to protect the environment.²⁶ It asserted that “[m]an has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations.”²⁷ It recognized the existence of a right to a healthy environment, and examined core questions relating to the scope of the right, identity of right-holders and duty-bearers, implementation of the right, and its broader recognition under international law.²⁸

The Stockholm Declaration 1) comprises a set of principles concerning human rights, management of natural resources, and pollution threats; 2) establishes a link between development and the environment; 3) provides planning, environmental and demographic policy; 4) acknowledges the role of science, technology, and education in respect to the environment; 5) lays out State obligations to prevent environmental harm, encouraging State cooperation with international institutions; and 6) recognizes the threat of nuclear weapons in respect to the environment.²⁹ According to Danish environmental lawyer Veit Koester, the Stockholm Declaration

23. ALEXANDRA L. PHELAN, ET AL., CLIMATE CHANGE AND HUMAN RIGHTS: INTELLECTUAL PROPERTY CHALLENGES AND OPPORTUNITIES (Sept. 22, 2015), https://eprints.qut.edu.au/91198/1/Phelan_ANU%20Climate%20Change%20Rights%20Policy%20Paper.pdf.

24. *Framework Principles*, Knox Report A/HRC/37/59 (Jan. 24, 2018), *supra* note 10.

25. Veit Koester, *From Stockholm to Brundtland*, 20 ENVTL. POL’Y & L. 14 (1990).

26. United Nations Convention on the Law of the Sea, Dec. 10, 1982, 1833 U.N.T.S. 398.

27. See U.N. Conference on the Human Env’t, *Stockholm Declaration*, U.N. Doc. A/CONF.48/14/Rev.1 (June 16, 1972) [hereinafter *Stockholm Declaration*].

28. See CTR. FOR INT’L ENVTL. LAW, UNEP COMPENDIUM ON HUMAN RIGHTS AND THE ENVIRONMENT: SELECTED INTERNATIONAL LEGAL MATERIALS AND CASES (2014); *Stockholm Declaration*, *supra* note 27.

29. *Stockholm Declaration*, *supra* note 27; Koester, *supra* note 25, at 14.

was “highly visionary, emphasizing the close relations between environmental problems, development issues, human rights and even disarmament.”³⁰

A decade later, in 1982 the United Nations General Assembly adopted the World Charter for Nature, which reaffirms many of the general principles in the Stockholm Declaration. Adoption of the World Charter highlighted the growth of the global movement to protect the environment.³¹ Although the World Charter for Nature is not well known, many of its broad principles have risen to international customary law.³² The Stockholm Declaration, the World Charter for Nature, and the Convention on the Law of the Sea, are recognized as the key pillars of an “international constitution for the world environment.”³³

Since the 1970s and 1980s, the global community has witnessed a surge in international multilateral environmental agreements.³⁴ These treaties, declarations, and resolutions support the strong connection between human rights and the environment, and have served as an institutional and legal platform for the recognition of the right to a healthy environment. For example, the Rio Declaration acknowledges the importance of recognizing the interrelation of the environment, human beings, and sustainable development.³⁵ Further, the Rio Declaration recognizes the important link between the environment and quality of life.³⁶

The right to a healthy environment is not new. The international community has interpreted it as a preexisting right, similar to the right to clean water and sanitation.³⁷ It was not until November of 2002 that the Committee on Economic, Social and Cultural Rights explicitly recognized that the right to water is indispensable for the enjoyment of the right to life, human dignity, and for the realization of other human rights.³⁸ In 2010, the United Nations General Assembly affirmed that the right to clean water and sanitation is essential for the enjoyment of other hu-

30. Koester, *supra* note 25, at 14.

31. *Stockholm Declaration*, *supra* note 27; G.A. Res. 37/7 (Oct. 28, 1982); *see also* Koester, *supra* note 25, at 14.

32. Koester, *supra* note 25, at 15.

33. *Id.* (quoting Cheryl L. Jamieson, *An Analysis of Municipal Wetlands Laws and Their Relationship to the Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar)*, 4 PACE ENVTL. L. REV. 177, 179 (1986)).

34. *See, e.g., Stockholm Declaration*, *supra* note 27; International Maritime Organization Convention for the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, Dec. 29, 1972, 1046 U.N.T.S. 120; UNESCO Convention for the Protection of World Cultural and Natural Heritage, Nov. 16, 1972, 1037 U.N.T.S. 151; Washington Convention on International Trade in Endangered Species of Wild Fauna and Flora, Mar. 3, 1973, 993 U.N.T.S. 243.

35. *Rio Declaration*, *supra* note 21, princ. 1.

36. *Id.* princ. 8.

37. *See African Charter on Human and Peoples' Rights* art. 25, Oct. 21, 1986; *Protocol of San Salvador* art. 11, Nov. 17, 1988.

38. Comm'n on Econ., Soc. & Cultural Rights, *General Comment No. 15: The Right to Water (Arts. 11 and 12 of the Covenant)*, U.N. Doc. E/C. 12/2002/11 (Jan. 20, 2003).

man rights.³⁹ Similarly, the right to a healthy environment is an existing human right that derives its authority from human rights norms in existing international human rights treaties, agreements, and declarations.⁴⁰ Binding decisions from human rights tribunals and regional courts have provided an international framework in which the right to a healthy environment is recognized, protected, and implemented. This “greening” of human rights has evolved due to the understanding that the right to a healthy environment is fundamental at the domestic and international planes.

Around the world, States prioritize the domestic right to a healthy environment. By 2010, seventy percent of States explicitly recognized environmental rights or duties owed to their nationals or residents.⁴¹ Constitutional environmental provisions have been adopted and incorporated throughout Latin America, Europe, Asia, and Africa.⁴² As a way to protect the right to a healthy environment domestically, most countries around the world have created specialized environ-

39. G.A. Res. 64/292 (July 28, 2010).

40. Bali Guidelines, *supra* note 21.

41. Rep. of the U.N. High Comm’r for Human Rights, *Analytical Study on the Relationship Between Human Rights and the Environment*, ¶ 30, U.N. Doc. A/HRC/19/34 (Dec. 16, 2011).

42. *See id.* at n.2. In the Ugandan Constitution, environmental protections are conceptualized broadly, recognizing Ugandan’s reliance on natural resources, and the close relationship between environmental protection and poverty in developing nations. Report of the Uganda Constitutional Comm’n, Analysis and Recommendations, ¶ 26.39. The Argentinian constitution recognizes that the right of all persons and future generations to a “healthy environment fit for human development.” Pt. II, art. 41, CONSTITUCIÓN NACIONAL [CONST. NAC.] (Arg.). Similar to the Argentinian Constitution, the South African Constitution explicitly recognizes the right to a healthy environment for present and future generations and takes it further in that the South African government has the affirmative duty to ensure its fulfillment. S. AFR. CONST., 1996, ¶ 24, 152; *see also* Louis J. Kotzé & Anél du Plessis, *Some Brief Observations on Fifteen Years of Environmental Rights Jurisprudence in South Africa*, 3 J. CT. INNOVATION 157, 158 (2010). The Italian Constitution explicitly recognizes the right to a healthy environment. Article 117 provides that the State has the duty to protect the environment and ecosystem. Art.117(2)(s), Costituzione [Cost.] (It.). In France, the Constitution incorporates the Charter for the Environment, and states that “[s]tatutes shall . . . lay down the basic principles of . . . the preservation of the environment.” 1958 LA CONSTITUTION, art. 34 (Fr.). India’s Constitution recognizes the duty of the State to protect the environment but expands this duty to all Indian citizens. “It shall be the duty of every citizen of India . . . to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures.” Although the Indian constitution provides that the environmental rights contained in it are not enforceable, Indian courts have found that the right to a clean environment is indeed enforceable based on its relationship to the protection of the right to life. INDIA CONST. pt. IVA, art. 51(A); *see* Peggy Rodgers Kalas, *Environmental Justice in India*, 1 ASIA-PAC. J. ON HUM. RTS. & L. 97, 108 n.51 (2000). Similarly, in Nigeria, provisions protecting the right to a healthy environment are not justiciable, however, the right to a healthy environment is expressly correlated to other human rights. As such, the Nigerian constitution provides that a failure to protect the environment may lead to violations of individual human rights. CONSTITUTION OF NIGERIA (1999), § 20; Uchenna Jerome Orji, *Right to a Clean Environment: Some Reflections*, 42 ENVTL. POL’Y & L. 285, 286 (2012).

mental institutions.⁴³ While the specific form varies, regulation of environmental matters at the domestic level generally involves a regulatory scheme, environmental law enforcement, incorporation of environmental matters into decision-making, and general environmental education.⁴⁴

III. THE RIGHT TO A HEALTHY ENVIRONMENT AND ITS SUBSTANTIVE PROTECTION

Every person has the right to a healthy environment.⁴⁵ The right to a healthy environment protects from environmental harm that interferes with the full and effective enjoyment of human rights.⁴⁶ Generally, it is understood that human rights are interrelated, interdependent, and interconnected. The right to a healthy environment is fundamental to human dignity, equality, and freedom.⁴⁷ The right to a healthy environment is considered an “underlying determinant of health,”⁴⁸ and protection of environmental rights factors heavily in the protection of the right to life, reproductive rights, rights of the child, and rights to adequate food, safe drinking water, housing, and sanitation, among others.⁴⁹ The quality of food and water and the adequacy of housing largely depend on the State’s assurance that these basic necessities are free from hazardous substances or pollutants.⁵⁰

43. Org. of Am. States, *Domestic Environmental Law* (Feb. 23, 2007), <http://www.oas.org/dsd/tool-kit/documentos/moduleii/domestic%20environmental%20law.pdf>.

44. *Id.*

45. *Framework Principles*, Knox Report A/HRC/37/59 (Jan. 24, 2018), *supra* note 10, ¶ 15.

46. *Id.* at Annex ¶¶ 2, 4.

47. *Id.* ¶ 16.

48. U.N. Office of the High Comm’r for Human Rights, *Fact Sheet No. 31, The Right to Health* at 3 (June 2008), <http://www.refworld.org/docid/48625a742.html>; *Framework Principles*, Knox Report A/HRC/37/59 (Jan. 24, 2018), *supra* note 10, at Annex ¶ 4 (Framework Principle 2).

49. Baskut Tuncak (Special Rapporteur on Human Rights and Toxics), *Report of the Special Rapporteur on the Implications for Human Rights of the Environmentally Sound Management and Disposal of Hazardous Materials*, ¶ 12, U.N. Doc. A/HRC/33/41 (Aug. 2, 2016) [hereinafter Tuncak Report A/HRC/33/41]; *Framework Principles*, Knox Report A/HRC/37/59 (Jan. 24, 2018), *supra* note 10, at Annex ¶ 4 (citing Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, art.1, June 25, 1998, 2161 U.N.T.S. 447); African Charter on Human and Peoples Rights, art. 24, June 27, 1981, 1520 U.N.T.S. 217; Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights “Protocol of San Salvador”, art. 11, Nov. 17, 1988, O.A.S.T.S. No. 69; Ass’n of Se. Asian Nations, ASEAN Human Rights Declaration and Phnom Penh Statement on the Adoption of the ASEAN Human Rights Declaration art. 28, (2012); *see also* U.N. Int’l Covenant on Civil and Political Rights, Human Rights Comm., CCPR General Comment No. 6: Art. 6 (Right to Life), ¶ 5, U.N. Doc. HRI/Gen/1/Rev.9 (Vol. I) (April 30, 1982); *Framework Principles*, Knox Report A/HRC/37/59 (Jan. 24, 2018), *supra* note 10, at Annex ¶ 4 (Framework Principle 2); International Covenant on Economic, Social and Cultural Rights art. 12, Jan. 3, 1976, 993 U.N.T.S. 3.

50. Tuncak Report A/HRC/33/41, *supra* note 49.

In the case of *Yakye Axa Indigenous Community v. Paraguay*, the Inter-American Court of Human Rights (Inter-American Court) recognized the interdependence between the Yakye Axa indigenous community and their ancestral lands, customs, and natural resources.⁵¹ The Yakye Axa community is an indigenous community of hunter-gatherers that lives in the Paraguayan Chaco and has primarily relied on their ancestral lands for cultural and physical survival.⁵² The Inter-American Court found that the Yakye Axa community had suffered from human rights violations resulting from the lack of clean water, unsanitary conditions, and inadequate access to medical care.⁵³ The Court highlighted the importance of the collective nature of the indigenous peoples' right to property, their reliance on the land for their cultural and physical survival, and the duty to protect their right to access a clean and healthy environment.⁵⁴ The Court quoted the United Nations Committee on Economic, Social, and Cultural Rights (CESCR) on the right to enjoy the highest attainable standard of health, emphasizing that for indigenous communities,

the health of the individual is often linked to the health of the society as a whole and has a collective dimension. In this regard, the committee considers that . . . denying them their sources of nutrition and breaking their symbiotic relationship with their lands, has a deleterious effect on their health.⁵⁵

The Inter-American Court found that the Yakye Axa indigenous community suffered as a result of being denied their ancestral land, and this denial impeded their ability to hunt, gather fruit, fish, access clean water for drinking, and access food sources.⁵⁶ As a result of being prevented from accessing their ancestral lands and the natural resources found there, the Yakye Axa indigenous community suffered from serious health conditions. In particular, children suffered negative impacts on school attendance and performance.⁵⁷ *Yakye Axa* is significant in the discussion of how we conceptualize and protect the right to a healthy environment because it establishes the close ties that communities have to their lands and ecosystem.⁵⁸

51. *Yakye Axa Indigenous Community v. Paraguay*, Merits, Reparations, and Costs, Judgment, Inter-Am. Ct. H.R. (ser. C) No. 125, ¶¶ 50.1, 50.16 (June 17, 2005).

52. *Id.* ¶¶ 50.1, 50.3.

53. *Id.* ¶¶ 50.97-98.

54. *Id.* ¶¶ 51, 63.

55. U.N. Office of the High Comm'r for Human Rights, CESCR General Comment No. 14: The Right to the Highest Attainable Standard of Health (Art. 12), ¶ 27, U.N. Doc. E/C.12/2000/4 (Aug. 11, 2000).

56. *Yakye Axa Indigenous Community*, Inter-Am. Ct. H.R. (ser. C) No. 125, ¶ 50.

57. *Id.* ¶ 50.

58. *Id.* ¶ 131.

As seen from *Yakye Axa*, clean and healthy ecosystems are critical for food sources, clean water and sanitation, and secure and adequate housing. Crops need the protection of a multitude of species, such as microbes, insects, worms, and small vertebrates for pest control as they fertilize soil and pollinate flowers.⁵⁹ Genetic diversity and species richness in fisheries and in flora are important for the production of fishing and timber industries—both building blocks for food and housing security.⁶⁰ In addition, diverse plant and animal species assist in the purification of aquatic systems by drawing excess nitrogen and phosphorus.⁶¹

Parallel to the substantive right to a healthy environment is the responsibility of States to protect individuals and communities from State and non-state actors engaging in environmentally harmful activities that violate human rights.⁶² “An illegal act which violates human rights and which is not initially directly imputable to a State can lead to international responsibility of the State, not because of an act itself, but because of the lack of due diligence to prevent the violation or to respond as required.”⁶³ The duty of due diligence requires States to proactively investigate potential or ongoing human rights violations, and take affirmative steps to mitigate any harm or risks of human rights violations.⁶⁴ When the State “knew or should have known” of the human rights violation, and failed to act with due diligence to prevent the harms, investigate and punish the responsible parties, and provide accountability to the victims, the State may be held responsible for such abuses.⁶⁵ As such, States have the responsibility to protect individuals and commu-

59. Knox Report A/HRC/34/49 (Jan. 19, 2017), *supra* note 11, ¶ 20 (citing Aaron S. Bernstein, *Biological Diversity and Public Health*, 35 ANN. REV. OF PUB. HEALTH at 158, 159 (2014)).

60. *See id.* ¶ 19 (citing Bradley J. Cardinale et al., *Biodiversity Loss and Its Impact on Humanity*, 486 NATURE, no. 7401, at 62 (2012); P.A. Harrison et al., *Linkages Between Biodiversity Attributes and Ecosystem Services: A Systematic Review*, 9 ECOSYSTEM SERVS. 191, 195 (2014)).

61. *See id.* ¶ 19 (citing UNEP, CONVENTION ON BIOLOGICAL DIVERSITY, WORLD HEALTH ORGANIZATION [WHO], CONNECTING GLOBAL PRIORITIES: BIODIVERSITY AND HUMAN HEALTH at 48 (2015) [hereinafter CONNECTING GLOBAL PRIORITIES]).

62. *Id.* ¶ 33; *see also* International Covenant on Civil and Political Rights art. 3, Dec. 16, 1966, 999 U.N.T.S. 171 [hereinafter ICCPR]; American Convention on Human Rights art. 1, Nov. 21, 1969, 1144 U.N.T.S. 143; African Charter on Human and Peoples' Rights, Oct. 21, 1986, 1520 U.N.T.S. 217 [hereinafter African Charter].

63. Velásquez Rodríguez v. Honduras, Judgment, Inter-Am. Ct. H.R. (ser. C) No. 4, ¶ 172 (Jul. 29, 1988).

64. *Id.* ¶ 176; Penha v. Brazil, Case 12.051, Inter-Am. Comm'n H.R., Report No. 54/01, OEA/Ser.L/V/II.111 doc. 20 rev. at 704 (2000).

65. *See, e.g.*, A.T. v. Hungary, Communication No. 2/2003, Comm. on the Elimination of All Forms of Discrimination Against Women, U.N. Doc. CEDAW/C/32/D/2/2003 (2003); González et al. (“Cotton Field”) v. Mexico, Preliminary Objection, Merits, Reparations, and Costs, Judgment, Inter-Am. Ct. H.R. (ser. C), No. 205 (Nov. 16, 2009); Lenahan v. United States, Case. 12.626, Inter-Am. Comm'n H.R., Report No. 80/11 (2011); Osman v. United Kingdom, App.23452/94, 29 Eur. H.R. Rep. 245 (1998).

nities from the human rights violations resulting from climate change, polluted ecosystems, destroyed biodiversity, and other environmental harms.⁶⁶

In *Social and Economic Rights Action Centre v. Nigeria*, the Nigerian government was held responsible for violations of human rights because it failed to control and regulate the acts of a private oil company that was depositing toxic waste into the local environment and waterways.⁶⁷ As a result of the environmental harm, the Ogoni communities suffered from serious health problems such as skin infections, gastrointestinal, and reproductive problems.⁶⁸ In addition, the Ogoni suffered from the destruction of their food sources, homes, and villages.⁶⁹ The African Commission concluded that, “governments have a duty to protect their citizens, not only through appropriate legislation and effective enforcement but also by protecting them from damaging acts that may be perpetrated by private parties.”⁷⁰ In preventing human rights violations from occurring, States must engage in a series of preventative measures, such as performing ongoing risk management processes to identify, prevent and mitigate environmental harm that would result in the violation of the right to a healthy environment and other human rights.⁷¹ Additionally, courts have recognized that States have the duty to “protect against foreseeable environment impairment of human rights whether or not the environmental harm itself violates human rights law, and even whether or not the States directly cause the harm.”⁷²

Budayeva v. Russia illustrates the State’s duty to protect against foreseeable environmental harm.⁷³ In *Budayeva*, mudslides linked to climate change resulted in some of the inhabitants of the town of Tyrnauz being killed.⁷⁴ While Russia did not proactively cause the mudslides or the killing of the individuals in Tyrnauz, the European Court of Human Rights (European Court), recognized that the State still had the responsibility to take appropriate steps to safeguard the lives of the inhabitants of Tyrnauz.⁷⁵ The Court concluded that Russia had failed to imple-

66. Knox Report A/HRC/34/49 (Jan. 19, 2017), *supra* note 11, ¶ 37.

67. SERAC, *supra* note 16.

68. *Id.* ¶ 2.

69. *Id.* ¶¶ 7, 9.

70. *Id.* ¶ 57.

71. U.N. Human Rights Office of the High Comm’r, *Guiding Principles on Business and Human Rights*, U.N. Doc. HR/PUB/11/04 (2011). This ongoing risk management process requires that States assess actual and potential environmental and human rights impacts; integrate and respond to the findings; track responses; and communicate the information about how the impacts are or will be addressed.

72. John H. Knox (Special Rapporteur on Human Rights and the Environment), *Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment*, ¶ 37, U.N. Doc. A/HRC/31/52 (Feb. 1, 2016) [hereinafter Knox Report A/HRC/31/52 (Feb. 1, 2016)].

73. *Budayeva v. Russia*, 2008-II Eur. Ct. H.R. 267.

74. *Id.* ¶¶ 32-33.

75. *Id.* ¶ 138.

ment land-planning and emergency relief policies to protect against the foreseeable risk to life.⁷⁶ According to the Court, where the loss of life occurs due to environmental harm, the State must provide an adequate response to the environmental disaster to ensure effective protection of the right to life.⁷⁷ “The duty to protect against harmful interference with the enjoyment of human rights is accepted as a pillar of human rights law, many human rights bodies have applied that duty to such interference occurring as a result of environmental degradation.”⁷⁸

A. *Vulnerable Populations in Need of Special Protection in Relation to their Right to a Healthy Environment*

States have a special duty to provide heightened protection for vulnerable communities when they face environmental harm. Persons or communities may be rendered vulnerable to environmental harm due to circumstances that make them particularly susceptible, or because they face obstacles to exercising their human rights.⁷⁹ John Knox, Former Special Rapporteur on the issue of human rights obligations related to the environment, recognized that individuals or communities that are most vulnerable to environmental harm often include members of indigenous or traditional communities, ethnic, racial or other minorities, disabled or displaced persons, women, children, and persons living in poverty.⁸⁰ Some of these vulnerabilities may even intersect where persons or communities belong to more than one group.⁸¹ For example, indigenous women who live in poverty, or displaced children from a particular minority or with disabilities, are rendered vulnerable due to these intersecting factors. These intersecting vulnerabilities are discussed below in the context of the State’s duty to protect the right to a healthy environment.

76. *Id.* ¶¶ 150, 158.

77. *Id.* ¶¶ 158, 195.

78. Knox Report A/HRC/31/52 (Feb. 1, 2016), *supra* note 72, ¶ 39 (citing, John H. Knox (Special Rapporteur on Human Rights and the Environment), *Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment*, ¶¶ 47-61, U.N. Doc. A/HRC/25/53 (Dec. 30, 2013)).

79. *Framework Principles*, Knox Report A/HRC/37/59 (Jan. 24, 2018), *supra* note 10, at Annex ¶ 21 (Framework Principle 8).

80. *Id.* at Annex ¶ 41 (Framework Principle 14).

81. U.N. OFFICE OF THE HIGH COMM’R FOR HUMAN RIGHTS, MANUAL ON HUMAN RIGHTS MONITORING, ch. 15 at 5-12 (2011), <https://www.ohchr.org/Documents/Publications/Chapter15-20pp.pdf> (exploring how gender differences can affect human rights violations in various communities).

1. Protecting Indigenous, Traditional, or Other Disenfranchised Communities

Indigenous, traditional, minority, and other disenfranchised communities have historically been vulnerable to environmental harm and subjected to a host of human rights violations.⁸² Indigenous peoples stand out from any other group because of their special ties to ancestral lands and their natural environment. Their historic or traditional connection to the land, distinctive cultural practices, beliefs, languages, and policies often separate them from the rest of the population.⁸³ Self-identification as indigenous or tribal is an essential factor for determining which communities or groups qualify for protection under international law and international human rights law.⁸⁴ The identity of indigenous communities and their well-being is connected to their ancestral lands, natural systems, and various socio-cultural and economic values.⁸⁵ Well-being for indigenous cultures takes a holistic form where the balance and harmony with nature are important to identity, dignity, and survival.⁸⁶

Indigenous and traditional communities rely on forests, fisheries, and other national resources for their livelihood and cultural belonging. Development, industrial projects, and extractive industries that involve natural resource exploitation negatively impact indigenous communities.⁸⁷ Developmental and exploitative projects affect the ability of these communities to access their ancestral lands and hunting and fishing grounds, and their ability to freely roam and have autonomy over their economic, political, cultural, and spiritual lives.⁸⁸

The close ties of indigenous people with the land must be recognized and understood as the fundamental basis of their cultures, their spiritual life, their integrity, and their economic survival. For indigenous communities,

82. Rebecca Tsosie, *Indigenous People and Environmental Justice: The Impact of Climate Change*, 78 U. COLO. L. REV. 1625 (2007) (discussing the development of environmental justice movements throughout recent history and the relationship between environmental justice and human rights).

83. International Labour Convention, Convention Concerning Indigenous and Tribal Peoples In Independent Countries art. 1.1, June 27, 1989, 28 I.L.M. 1384 [hereinafter ILO Convention No. 169]; José Martínez Cobo (Special Rapporteur of the Sub-Commission on Prevention of Discrimination and Protection of Minorities), *Study of the Problem of Discrimination Against Indigenous Populations*, ¶¶ 362-82, U.N. Doc. E/CN.4/Sub.2/1986/7 (1986).

84. ILO Convention No. 169, *supra* note 83, art. 1.2; *see also* Inter-Am. Comm'n H.R., *Indigenous and Tribal Peoples' Rights Over Their Ancestral Lands and Natural Resources*, ¶ 31, OEA/Ser.L/V/II., Doc.56/09 (Dec. 30, 2009).

85. Kamaljit K. Sangha et al., *Ecosystems and Indigenous Well-Being: An Integrated Framework*, 4 GLOB. ECOLOGY AND CONSERVATION 197, 197-206 (2015).

86. U.N. Economic and Social Council (ESCOR), *Analysis on the Duty of the State to Protect Indigenous Peoples Affected by Transnational Corporations and Other Business Enterprises*, ¶ 10, U.N. Doc. E/C.19/2012/3 (Feb. 23, 2012).

87. *Id.* ¶ 2.

88. *Id.*

relations to the land are not merely a matter of possession and production but a material and spiritual element which they must fully enjoy, even to preserve their cultural legacy and transmit it to future generations.⁸⁹

International bodies, human rights commissions, and courts have long recognized that States have a heightened duty to protect the rights of indigenous persons. The United Nations Declaration on the Rights of Indigenous Peoples and the International Labour Organization (ILO) Convention No. 169 on Indigenous and Tribal Peoples (1989) provide that States must recognize that indigenous peoples have a right to their lands, natural resources, autonomy, and self-determination.⁹⁰ These instruments, and a host of other international and regional instruments, judicial, and quasi-judicial bodies recognize that indigenous peoples have the rights to self-determination,⁹¹ adequate housing, food, education, health, water, and intellectual rights.⁹² Indigenous communities have the right to have equal dignity, sustainable economic and social development that is compatible with their cultural characteristics, and the ability to exercise their cultural traditions, customs and language.⁹³ The recognition of collective and indigenous rights has been instrumental in growing the understanding that ancestral lands can belong to communities collectively with shared access, a right to be consulted and make decisions, and therefore to organize themselves as a people.⁹⁴

Traditional, local, minority or other disenfranchised groups have received less attention than indigenous peoples but are equally important for our discussion of vulnerable communities in relation to environmental harm. Traditional or “local” communities generally do not self-identify as indigenous, but may rely on natural resources for their subsistence and cultural life.⁹⁵ These communities have long fought to protect the most fragile ecosystems and promote conservation efforts in

89. *Mayagna (Sumo) Awas Tingni Cmty. v. Nicaragua, Merits, Reparations, and Costs*, Judgment, Inter-Am. Ct. H.R., (ser. C) No. 79, ¶ 149 (Aug. 31, 2001).

90. U.N. Office of the High Comm’r for Human Rights, *Declaration on the Rights of Indigenous Peoples*, art. 3, 4, U.N. Doc. A/RES/61/295 (Oct. 2, 2007); ILO Convention No. 169, *supra* note 83, at arts. 1, 13-19.

91. Alongside the right to self-determination is the right to be consulted, take part in decision-making processes, and to have effective remedies. These procedural rights are discussed in a later section of the article. *See infra* Part IV.

92. *See* ICCPR, *supra* note 62, at art. 2, 27; International Covenant on Economic, Social and Cultural Rights art. 1, Dec. 16, 1966, 993 U.N.T.S. 3 [hereinafter ICESCR].

93. U.N. Office of the High Comm’r for Human Rights, *CERD General Comment No. 23: On the Rights of Indigenous Peoples*, ¶ 4, U.N. Doc. A/52/18 (1997).

94. *Mayagna (Sumo) Awas Tingni Cmty. v. Nicaragua, Merits, Reparations, and Costs*, Judgment, Inter-Am. Ct. H.R., (ser. C) No. 79, ¶ 164 (Aug. 31, 2001).

95. *Framework Principles*, Knox Report A/HRC/37/59 (Jan. 24, 2018), *supra* note 10, Annex ¶ 48 (Framework Principle 15).

their communities.⁹⁶ Community members are often marginalized, face obstacles to access resources, lack political power, are removed from decision-making processes, and are prevented from asserting their human rights.⁹⁷

The rights of traditional, local, or minority communities that do not qualify for protection under the indigenous rights legal framework are sometimes addressed under the concepts of Community-Based Property Rights⁹⁸ and Prior Informed Consent.⁹⁹ Community-Based Property Rights are framed in terms of the right to property, a livelihood and adequate standard of living, and cultural development.¹⁰⁰ While these rights are important for a community's collective rights to their natural environment, this article focuses primarily on Prior Informed Consent. Prior Informed Consent is a procedural protection of the right to a healthy environment, providing a right to a consultative process where communities exercise their autonomy and take part in decision-making processes.¹⁰¹

2. Protecting Women and Reproductive Health

Women of reproductive age have been recognized as being particularly vulnerable to environmental harm. Reproductive health is a fundamental component and central determinant of the right to health and quality of life for all individuals, but especially for women.¹⁰² Accessible clean water and sanitation, adequate food and nutrition, adequate housing, safe and healthy working conditions, a healthy

96. See GRAZIA BORRINI-FEYERABEND ET AL., INDIGENOUS AND LOCAL COMMUNITIES AND PROTECTED AREAS: TOWARDS EQUITY AND ENHANCED CONSERVATION, GUIDANCE ON POLICY AND PRACTICE FOR CO-MANAGED PROTECTED AREAS AND COMMUNITY CONSERVED AREAS 11 (2004), <https://portals.iucn.org/library/sites/library/files/documents/PAG-011.pdf>.

97. Daniel Barstow Magraw & Lauren Baker, *Globalization, Communities and Human Rights: Community-Based Property Rights and Prior Informed Consent*, 35 DENVER J. INT'L L. & POL'Y 413, 414 (2008).

98. Community-Based Property was first used by the Center for International Environmental Law to advocate on behalf of local communities trying to assert their collective rights to natural resources. Community-Based Property Rights seeks to protect the rights of communities that have relied on natural resources, including rights to ownership, use, and transfer of those resources within a community area and that can be accessed by all members of the community. *Id.*

99. Prior Informed Consent refers to the procedural right of communities to be consulted and being part of decision-making processes that affect their lives. *Id.* at 421-25.

100. ICESCR, *supra* note 92, at arts. 11, 12, 15.

101. Medio Ambiente y Derechos Humanos ("Environment and Human Rights"), Advisory Opinion OC-23/17, Inter-Am. Ct. H.R. ¶¶ 203, 230 (Nov. 15, 2017), http://www.corteidh.or.cr/docs/opiniones/seriea_23_esp.pdf (discussing, in the context of consultation under Article 26 of the American Convention on Human Rights, the importance of public participation and prior informed consent).

102. WHO, TRAINING FOR THE HEALTH SECTOR: INTRODUCTION TO REPRODUCTIVE HEALTH AND THE ENVIRONMENT 6 (2011), http://www.who.int/ceh/capacity/introduction_reproductive.pdf.

environment, and health-related education and information are all considered underlying determinants of sexual and reproductive health.¹⁰³

In order to protect the right to reproductive health, States must 1) take appropriate measures to reduce infant mortality; 2) promote the healthy development of children; 3) improve all aspects of environmental and industrial hygiene; 4) prevent, treat and control epidemic, endemic and occupational diseases; and 5) create the proper conditions to ensure medical attention for illnesses.¹⁰⁴ The Committee on Economic, Social and Cultural Rights has recognized the need of States to prioritize sexual and reproductive rights, especially for women and girls.¹⁰⁵ Particular attention should be paid to women who suffer from “intersecting forms of discrimination that exacerbate exclusion.”¹⁰⁶ Exposure to toxic¹⁰⁷ chemicals and pollution can lead to fertility impairments, birth defects, neurological disorders, hypertensive disorders, and endocrine disorders,¹⁰⁸ thus violating their right to health.

3. Protecting Vulnerable Children

Children have long been recognized as a vulnerable population in a variety of circumstances. The international community has recognized that millions of children suffer from environmental harm that prevents them from fully exercising and enjoying their human rights.¹⁰⁹ The United Nations General Assembly has repeatedly recognized the importance of a healthy environment for children.¹¹⁰ Children are particularly sensitive to exposure to toxic chemicals and pollution.¹¹¹ The World Health Organization estimated that in 2012, over 1.7 million children under

103. ESCOR, *CESCR General Comment No. 22*, ¶ 7-8, U.N. Doc. E/C.12/GC/22 (May 2, 2016) [hereinafter *CESCR General Comment No. 22*].

104. ICESCR, *supra* note 92, at art. 12(2).

105. CESCR *General Comment No. 22*, *supra* note 103, ¶ 2.

106. *Id.*

107. In this discussion of environmental harm and human rights, “toxic” refers to all forms of hazardous substances and wastes that may constitute a threat to a person’s health, life, and personal integrity, including pollution, toxic chemicals, radioactive substances, and others. See Tuncak Report, A/HRC/33/41, *supra* note 49, ¶ 4.

108. Dore Hollander, *Environmental Effects of Reproductive Health: The Endocrine Disruption Hypothesis*, 29 PERSP. ON SEXUAL & REPROD. HEALTH 2, at 89 (1997).

109. John H. Knox (Special Rapporteur on Human Rights and the Environment), *Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment*, ¶¶ 4-9, U.N. Doc. A/HRC/37/58 (Jan. 24, 2018) [hereinafter Knox Report A/HRC/37/58 (Jan. 24, 2018)].

110. G.A. Res. S-27/2, annex, A World Fit for Children, ¶ 7 (May 10, 2002).

111. Philip J. Landrigan & Lynn R. Goldman, *Children’s Vulnerability to Toxic Chemicals: A Challenge and Opportunity to Strengthen Health and Environmental Policy*, 30 HEALTH AFF. (2011), <https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2011.0151>.

the age of five died of exposure to environmental pollution and toxic chemicals.¹¹² The increased risks of “cancer, diabetes, respiratory problems, behavioral disorders, hormonal dysfunctions and other health impacts linked to hundreds of toxic chemicals children are exposed to cannot be erased.”¹¹³ In addition, exposure to particular forms of environmental harm—such as pollution in water sources—can lead to food insecurity, malnutrition, and stunting of development.¹¹⁴ Baskut Tuncak, the Special Rapporteur on Hazardous Substances, has recognized that “[t]here is a ‘silent pandemic’ of disability and disease associated with exposure to toxic chemicals and pollution during childhood, many of which do not manifest themselves for years or decades.”¹¹⁵ The high levels of disabilities and diseases caused by exposure to toxic chemicals and pollution often manifest later in children’s lives.¹¹⁶ Furthermore such exposure is often intergenerational, as mothers’ exposure to toxic and hazardous chemicals is often passed on to their children in the womb.¹¹⁷ Children from lower income communities tend to be exposed to higher concentrations of air pollution and waste.¹¹⁸ According to a report by UNICEF, “300 million children live in areas with extremely toxic levels of air pollution” and “600,000 children under the age of five die from diseases caused or exacerbated by the effects of indoor and outdoor pollution.”¹¹⁹ Their exposure to chemical and other environmental harm is exacerbated by malnutrition and inability to receive proper and timely medical attention.¹²⁰ This disproportionate exposure to environmental harm also reflects “environmental racism.”¹²¹ This discriminatory treatment undermines chil-

112. ANNETTE PRÜSS-USTÜN ET AL., WHO, PREVENTING DISEASE THROUGH HEALTHY ENVIRONMENTS: A GLOBAL ASSESSMENT OF THE BURDEN OF DISEASE FROM ENVIRONMENTAL RISKS, 112 (2016).

113. Tuncak Report A/HRC/33/41, *supra* note 49, ¶ 41.

114. WHO, *Don’t Pollute My Future!*, at 6, WHO/FWC/IHE/17.01 (2017); WHO, *Inheriting a Sustainable World?*, at 10-11 (2017); United Nations Children’s Fund [UNICEF], *Sustainable Development Starts and Ends with Safe, Healthy and Well-Educated Children*, at 8 (2013).

115. Tuncak Report A/HRC/33/41, *supra* note 49, ¶ 4.

116. *Id.*

117. *Id.* ¶ 5 (citing *Gynecology and Obstetrics Opinion on Reproductive Health Impacts of Exposure to Toxic Environmental Chemicals*, 131 INT’L J. OF GYNECOLOGY AND OBSTETRICS 220 (2015)); ENVTL. WORKING GRP., BODY BURDEN: THE POLLUTION IN NEWBORNS (2005), <https://www.ewg.org/research/body-burden-pollution-newborns>.

118. UNICEF, *Clear the Air for Children*, at 9, 34 (2016) [hereinafter *Clear the Air for Children*] (citing Torð Kjellström et al., *Urban Environmental Health Hazards and Health Equity*, 84 J. URB. HEALTH 86 (2007)).

119. *Id.* at 6.

120. Tuncak Report A/HRC/33/41, *supra* note 49, ¶¶ 6, 47.

121. Rev. Dr. Benjamin Chavis coined the term “environmental racism” when discussing toxic waste sites and race in the United States. Richard J. Lazarus, *Environmental Racism! That’s What It Is*, 2000 U. ILL. L. REV. 255, 257 (2000) (quoting Karl Grossman, *The People of Color Environmental Summit*, in UNEQUAL PROTECTION – ENVIRONMENTAL JUSTICE & COMMUNITIES OF COLOR 273, 278 (Robert D. Bullard ed., 1994)). “Environmental racism” refers to the joining of the civil rights and en-

dren's fundamental human rights, including the right to human dignity, equality and nondiscrimination.¹²² Additionally, children and parents from vulnerable communities tend to face obstacles created by information deficits, which aggravate their health risks and the impact of exposure.¹²³

The international community has agreed that children's best interests must be a priority. The Convention on the Rights of the Child (CRC) places the obligation on States to provide children with a healthy environment in which they can reach their full potential.¹²⁴ The CRC protects a child's right to enjoy the highest attainable standard of health, which requires the prevention of "exposure to dangers and risk of environmental pollution."¹²⁵ The particular rights of children are also recognized by other international instruments, such as the International Covenant on Civil and Political Rights (art. 24), European Social Charter (art. 7), and the Stockholm Convention on Persistent Organic Pollutants (art. 10(c)), among others.¹²⁶

The duty to ensure that children have access to a healthy environment includes the protection from exposure to toxic chemicals and substances, both during childhood and during reproductive age. The CRC has emphasized that the responsibility of States to protect children includes the duty to take appropriate measures to prevent damaging effects of environmental harm and contamination of water supplies.¹²⁷ The CRC recognizes that the standard for the protection of children is the "best interests of the child."¹²⁸ According to Special Rapporteur Tuncak, "[t]he best interests of the child are best served by preventing exposure to toxic chemicals and pollution, and taking precautionary measures with respect to those substances whose risks are not well understood."¹²⁹ Therefore, children's rights to life,

environmental movements to describe the race-oriented claim of racial and economic inequity factors to explain the discriminatory treatment of minorities suffering from environmental harms. *Id.* at 259.

122. Tuncak Report A/HRC/33/41, *supra* note 49, ¶ 6.

123. *Id.* ¶ 7 (citing Danish Env'tl. Prot. Agency, *Exposure of Pregnant Consumers to Suspected Endocrine Disruptors*, *Miljøstyrelsen*, 2012, s. 7; UNEP, *Global Chemicals Outlook – Towards Sound Management of Chemicals*, at 49 (2013); see Baskut Tuncak (Special Rapporteur on Human Rights and Toxics), *Report of the Special Rapporteur on the Implications for Human Rights of the Environmentally Sound Management and Disposal of Hazardous Substances and Wastes*, U.N. Doc. A/HRC/30/40 (July 8, 2015).

124. See Convention on the Rights of the Child art. 4, 24.1, Nov. 20, 1989, 1577 U.N.T.S. 3 [hereinafter CRC].

125. *Id.* at art. 24(2).

126. See ICCPR, *supra* note 62, art. 24; Council of Europe, *European Social Charter*, ETS 163, art. 7 (May 3, 1996), <https://rm.coe.int/168007cf93>; Stockholm Convention on Persistent Organic Pollutants art. 10(c), May 17, 2004, 2256 U.N.T.S. 119.

127. Concluding Observations of the Comm. on the Rights of the Child, 24th Sess., ¶ 50, U.N. Doc. CRC/C/15/Add.125 (June 28, 2000).

128. CRC, *supra* note 124, at art. 3(1).

129. Tuncak Report A/HRC/33/41, *supra* note 49, ¶ 21.

health, physical and mental integrity, food, clean water and sanitation, among others, are “primary consideration[s]” when protecting against environmental harm.¹³⁰

Children’s right to a healthy environment is interconnected to their right to life.¹³¹ States have the duty to protect children to the maximum extent possible to ensure their survival and development.¹³² States must protect children’s human rights holistically, taking into consideration the interdependence and indivisibility of human rights.¹³³ “The child’s right to life, survival and development is contingent upon the realization of the rights to health, to food, water and adequate housing, and to a healthy environment”¹³⁴

In *L.C.B. v. United Kingdom*, the European Court of Human Rights considered the case of a child who was diagnosed with leukemia due to her father’s exposure to radiation from his work in the Royal Air Force.¹³⁵ The child’s father had been stationed in Maralinga, Australia, and the Christmas Islands, where the United Kingdom carried out nuclear testing in the Pacific Ocean.¹³⁶ It was contested whether the purpose of the nuclear testing had been to expose the servicemen to the nuclear radiation or whether they had been unintentionally exposed.¹³⁷ *L.C.B.* argued that her basic human rights had been violated due to the radiation contamination that her father had been exposed to.¹³⁸ She also argued that she had not been warned of the effects of her father’s exposure to nuclear radiation, resulting in her inability to seek pre-natal and post-natal monitoring that could have led to an early diagnosis and treatment.¹³⁹ Although the European Court could not find with certainty a causal link between the father’s exposure and the child’s leukemia, it did find that States have the duty to take appropriate measures to prevent violations of the right to life by safeguarding the lives of people in its territory.¹⁴⁰

Similarly, in *Öneryildiz v. Turkey*, the European Court of Human Rights recognized the link between children’s right to life, environmental harm, and the State’s duty to protect the lives of its residents.¹⁴¹ Mr. Öneryildiz argued that while living in the slum quarter of a district in Istanbul, close to a rubbish dump, a

130. CRC, *supra* note 124, at arts. 2, 6, 8, 13, 17, 19, 23, 24, 30, 32, 37.

131. *Id.* at art. 6.

132. *Id.* at art. 6.

133. See Office of the High Comm’r for Human Rights, *CRC General Comment No. 5*, U.N. Doc. CRG/GC/2003/527 (Nov. 27, 2003).

134. Tuncak Report A/HRC/33/41, *supra* note 49, ¶ 8.

135. *L.C.B. v. United Kingdom*, 27 Eur. Ct. H.R. 212, ¶ 13 (1998).

136. *Id.* ¶¶ 10-12.

137. *Id.* ¶ 11.

138. See *id.* ¶¶ 25-29.

139. *Id.* ¶ 21.

140. *Id.* ¶¶ 36, 39, 41.

141. *Öneryildiz v. Turkey*, 41 Eur. Ct. H.R. 20, ¶ 59 (2004).

methane explosion resulted in a landslide,¹⁴² causing the death of thirty-nine people.¹⁴³ Experts concluded that the Istanbul City Council was liable for failing to prevent the technical conditions of the dump and the dangerous conditions in which residents of the slum lived.¹⁴⁴ The European Court recognized the special duty of the State to take appropriate measures to preserve the life of its residents.¹⁴⁵ It emphasized that the public has the right to access clear and full information regarding conditions that may pose a danger or result in violations of human rights, and that the State had the duty to provide the public with that information.¹⁴⁶ This case reflects the interconnectedness of the right to a healthy environment, the right to life, and the vulnerability of children living in poverty. Without access to information regarding potential hazards, residents of communities such as the slum in which Mr. Öneriyıldız lived are unable to ensure their own survival.

The right to a healthy environment is also interconnected to the right to physical and mental integrity. The Committee on the Rights of the Child (CRC) interprets the right to life and a child's development holistically to include a child's "physical, mental, spiritual, moral, psychological and social development."¹⁴⁷ The CRC explicitly requires that States be proactive in taking steps to protect children from environmental harm.¹⁴⁸ The CRC provides that children have a right to be free from "all forms of physical or mental violence, injury or abuse, neglect or negligent treatment."¹⁴⁹ Continuous exposure to toxic chemicals and environmental pollution can rise to the level of torture and cruel, inhuman, and degrading treatment in violations of conventions such as the CRC.¹⁵⁰

In *San Mateo de Huanchor v. Perú*, a coalition of indigenous communities requested that the Inter-American Commission grant precautionary measures to protect their rights to life, personal security, and health. The impacted communities asked that the State immediately remove dangerous toxic waste containing heavy metals that had been dumped in mining sites.¹⁵¹ Toxic waste contaminated the air, water, and soil where the residents of San Mateo lived, resulting in high levels of

142. *Id.* ¶¶ 2, 9, 10, 18.

143. *Id.* ¶ 18.

144. *Id.* ¶ 13.

145. *Id.* ¶ 71.

146. *Id.* ¶¶ 86, 90.

147. U.N. Office of the High Comm'r for Human Rights, *CRC General Comment No. 13*, ¶ 62, U.N. Doc. CRC/C/GC/13 (Apr. 18, 2011).

148. Comm. on the Rights of the Child, Report of the 2016 Day of General Discussion: Children's Rights and the Environment, at 6 (2016) [hereinafter *Children's Rights and the Environment*].

149. CRC, *supra* note 124, at art. 19; see also U.N. Office of the High Comm'r for Human Rights, *CRC General Comment No. 4: Adolescent Health and Development in the Context of the Convention on the Rights of the Child*, ¶ 12, U.N. Doc. CRC/GC/2003/4 (July 1, 2003).

150. Tuncak Report A/HRC/33/41, *supra* note 49, ¶ 36.

151. *San Mateo de Huanchor*, *supra* note 15, ¶ 8.

such toxic substances in their blood and urine.¹⁵² Children were among the most affected by this exposure, in some cases suffering irreparable neurological damage.¹⁵³

The Inter-American Commission issued a nonbinding order that the Peruvian State immediately remove the toxic waste from San Mateo. It recognized that such contamination had created a public health crisis that could be characterized as violative of basic human rights, including the rights of the child.¹⁵⁴ *San Mateo de Huancho* is a significant recognition that States have a duty to immediately remove toxic waste in communities affected by it, that children are particularly vulnerable to environmental harm and may suffer irreparable injuries, and that environmental contamination can result in serious violations of human rights.

Former Special Rapporteur John Knox emphasized that “taken as a whole, no group is more vulnerable to environmental harm than children.”¹⁵⁵ As such, we must prioritize policies that consider the best interests of children.

4. Protecting Environmental Human Rights Defenders and Others Working to Protect the Environment

Human rights defenders are persons that work to protect and promote human rights. The Declaration on Human Rights Defenders provides that there is no specific definition on who is or can be a human rights defender, but that “individuals, groups and associations . . . contributing to . . . the effective elimination of all violations of human rights and fundamental freedoms of peoples and individuals” are protected.¹⁵⁶ Human rights defenders generally work at the local or national level, but can also work internationally, performing a range of tasks from investigating and shedding light on human rights violations; facilitating community or public participation in decision-making processes; providing training or equipment to improve access to information; assisting individuals and communities in accessing basic services; and teaching human rights, or disseminating information about human rights standards.¹⁵⁷

Environmental human rights defenders are those who work to protect the environment from harm, and who seek to protect the communities affected by envi-

152. *Id.* ¶ 26.

153. *Id.* ¶¶ 11, 26.

154. *Id.* ¶ 66.

155. Knox Report A/HRC/37/58 (Jan. 24, 2018), *supra* note 109, ¶ 15.

156. G.A. Res. A/RES/53/144, annex, Declaration on the Right and Responsibility of Individuals, Groups and Organs of Society to Promote and Protect Universally Recognized Human Rights and Fundamental Freedoms (Mar. 8, 1999) [hereinafter Declaration on Human Rights Defenders].

157. U.N. Office of the High Comm’r for Human Rights, *Human Rights Defenders: Protecting the Right to Defend Human Rights, Factsheet No. 29*, 3-5 (Apr. 2004) [hereinafter *Factsheet 29*].

ronmental harm.¹⁵⁸ Like other human rights defenders, environmental human rights defenders have been historically targeted for their advocacy efforts to protect the environment and the human rights of vulnerable communities.¹⁵⁹ Defenders have faced “unprecedented risks,” are vulnerable to state-sanctioned violence, and are targeted by private entities and corporations for seeking to protect their communities.¹⁶⁰ Human rights defenders and environmental human rights defenders have been historically subjected to a range of human rights abuses, including being the “target of executions, torture, beatings, arbitrary arrest and detention, death threats, harassment and defamation, as well as restrictions on their freedom of movement, expression, association and assembly. Defenders have been the victims of false accusations and unfair trials and convictions.”¹⁶¹ In addition, gender identity and sexual orientation may render human rights defenders and environmental defenders more vulnerable to attacks from inside and outside their community.¹⁶² Some women defenders and defenders belonging to gender minorities have suffered killings, death threats, kidnapping, beatings, torture, arbitrary arrests and detention, harassment, and rape and other forms of sexual violence, due to their identity.¹⁶³

Berta Cáceres, an Honduran environmental human rights defender, was killed in March 2016 for her work in rallying the indigenous Lenca people and waging a grassroots campaign to halt a dam development project in indigenous territory.¹⁶⁴ Cáceres continued her work to protect the Lenca community, despite repeated acts of violence—including gender-specific attacks.¹⁶⁵ Her murder is directly linked to her environmental human rights defense work and identity as an indigenous wom-

158. The term “environmental human rights defenders” has been used by Special Rapporteur Knox, to refer to individuals working to protect the environment. They have also been referred to as “environmental defenders.” See John H. Knox (Special Rapporteur on Human Rights and the Environment), *Report of the Special Rapporteur on the Situation of Human Rights Defenders*, ¶ 7 U.N. Doc. A/71/281 (Aug. 3, 2016).

159. *Factsheet 29*, *supra* note 157.

160. *Violence Against Environmental Defenders – New U.N. Major Report Urges Zero-Tolerance*, U.N. OFFICE OF THE HIGH COMM’R FOR HUMAN RIGHTS (Oct. 21, 2016), <https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=20730&LangID=E>.

161. *Factsheet 29*, *supra* note 157, at 10.

162. See *Berta Cáceres’ Murder: UN Experts Renew Call to Honduras to End Impunity*, U.N. OFFICE OF THE HIGH COMM’R FOR HUMAN RIGHTS (Apr. 11, 2016), <https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=19805> [hereinafter *U.N. Experts Renew Call to Honduras*].

163. *Factsheet 29*, *supra* note 157, at 11-14.

164. *U.N. Experts Renew Call to Honduras*, *supra* note 162; *Berta Cáceres, 2015 Goldman Prize Recipient, South and Central America*, THE GOLDMAN ENVTL. PRIZE, <https://www.goldmanprize.org/recipient/berta-caceres/> (last visited Feb. 16, 2020).

165. *U.N. Experts Renew Call to Honduras*, *supra* note 162.

an.¹⁶⁶ Many others, like Ms. Cáceres, have lost their lives or have been victims of human rights violations for their work to protect their communities from environmental harm and for exercising the right to participate in the decision-making process.¹⁶⁷ Persistent threats such as those faced by Berta Cáceres highlight the need to provide environmental human rights defenders with heightened protections so that they can safely engage in their work. Their status as defenders places them at particular risk of being targeted by both State and non-state actors.

B. *Freedom from Discrimination and Equal Treatment of Disenfranchised or Vulnerable Communities*

The principle of nondiscrimination has been a pinnacle of the indigenous rights movement and has been adopted by other vulnerable and disenfranchised communities.¹⁶⁸ The principle of nondiscrimination is key to protect the right to equal treatment. It also recognizes that indigenous peoples and other traditional, local, and disenfranchised communities have suffered systemic and historic mistreatment in relation to their lands.¹⁶⁹ “An equality and nondiscrimination approach also supports the recognition of their collective lands, territories and resources as being equivalent to the rights of non-indigenous individuals to their property.”¹⁷⁰ Accordingly, States must ensure that all persons have equal access to a safe, clean, healthy, and sustainable environment, without discrimination.¹⁷¹

166. *Id.* The list of the United Nations experts that condemned the murder of Berta Cáceres: Eleonora Zielińska, Chairperson of the Working Group on the issue of discrimination against women in law and in practice; Victoria Tauli-Corpuz, Special Rapporteur on the rights of indigenous peoples; Michel Forst, Special Rapporteur on the situation of human rights defenders; Maina Kiai, Special Rapporteur on the rights to freedom of peaceful assembly and of association; David Kaye, Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression; Dubravka Šimonović, Special Rapporteur on violence against women, its causes and consequences; John Knox, Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment; and Başkut Tuncak, Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes.

167. CTR. FOR INT’L ENVTL. LAW [CIEL] & ARTICLE 19, SUBMISSION TO THE U.N. SPECIAL RAPPORTEUR ON THE SITUATION OF HUMAN RIGHTS DEFENDERS 1-2 (June 24, 2016), https://www.ciel.org/wp-content/uploads/2016/07/EHRD_24June2016.pdf.

168. See U.N. Declaration on Indigenous Peoples, *supra* note 17, at art. 2 (“Indigenous peoples and individuals are free and equal to all other peoples and individuals and have the right to be free from any kind of discrimination, in the exercise of their rights, in particular that based on their indigenous origin or identity.”).

169. U.N. Office of the High Comm’r for Human Rights, *Indigenous Peoples and the United Human Rights System, Factsheet 9/Rev. 2*, 8 (2013).

170. *Id.*

171. See *Framework Principles*, Knox Report A/HRC/37/59 (Jan. 24, 2018), *supra* note 10, at Annex ¶ 7 (Framework Principle 3).

Discrimination in the distribution of environmental harm disproportionately affects indigenous, traditional, local, minority, and other vulnerable communities.¹⁷² Global data shows that “more than two thirds of extremely poor people in low income countries and lower-middle income countries live in households where the head of households is from an ethnic minority group.”¹⁷³ In order to prevent and mitigate the effects of environmental discrimination, States must account for historical, systemic and persistent patterns of discriminatory treatment.

In *Maya Indigenous Communities v. Belize*, the Inter-American Commission found that there had been persistent and systematic environmental discrimination against Mayan communities.¹⁷⁴ The Commission agreed with the Mayans’ claim that Belize had violated their human rights by granting logging concessions and approving oil development projects.¹⁷⁵ The Inter-American Commission emphasized the need for States to comply with their obligation to provide special protection to indigenous communities against the exploitation and discrimination they faced at the hands of non-indigenous people.¹⁷⁶ The Commission found support for this position in Article II of the American Declaration on the Rights and Duties of Men, which recognizes the right to nondiscrimination.¹⁷⁷ The Inter-American Commission explained that “respect for and protection for the private property of indigenous peoples on their territories is of equal importance to non-indigenous property.”¹⁷⁸ It further explained that in order to protect the rights of

172. Vann R. Newkirk, II, *Trump’s EPA Concludes Environmental Racism Is Real*, ATLANTIC (Feb. 28, 2018), <https://www.theatlantic.com/politics/archive/2018/02/the-trump-administration-finds-that-environmental-racism-is-real/554315/>; see Rodolfo Stavenhagen (Special Rapporteur on the Rights of Indigenous Peoples) *Second Report on the Situation of Human Rights and Fundamental Freedoms of Indigenous Peoples*, ¶ 31, U.N. Doc. A/60/358 (Sept. 16, 2005).

173. *Discrimination, Inequality, and Poverty – A Human Rights Perspective*, HUMAN RIGHTS WATCH (Jan. 11, 2013), https://www.hrw.org/news/2013/01/11/discrimination-inequality-and-poverty-human-rights-perspective#_edn7 (citing Andy Sumner, *The New Face of Poverty: How Has the Composition of Poverty in Low Income and Lower Middle-Income Countries (excluding China) Changed Since the 1990s?*, (Institute of Development Studies, Working Paper No. 408, 2012)).

174. *Maya Indigenous Communities of Toledo District v. Belize*, Case 12.053, Inter-Am. Comm’n H.R., Report No. 40/04, OEA/Ser.L/V/II.122, doc. 5 rev. 1 (2004) [hereinafter *Maya Indigenous Communities*].

175. *Id.* ¶¶ 143-44.

176. *Id.* ¶ 115. The court found support for its ruling in *Dann v. United States*. Case 11.140, Inter-Am. Comm’n H.R., Report No. 75/02, doc. 5 (2002). The petitioners in the *Dann* case argued that their rights to property, ownership and control of ancestral lands, and nondiscrimination were violated because they were prevented from using, controlling, and disposing of their ancestral lands. *Id.* ¶¶ 39, 46, 54. In its analysis, the Inter-American Commission recognized that States need to take special measures to protect indigenous communities against exploitation and discrimination. *Id.* ¶ 125.

177. American Declaration on the Rights and Duties of Man, Res. XXX, Final Act of the Ninth International Conference of American States (Pan American Union), Bogota, Colombia, Mar. 30-May 2, 1948, at art. II reprinted in Inter-Am. Comm’n H.R., *Basic Documents Pertaining to Human Rights*, OAS/Ser.L/V/I.4 rev. 9 (2003).

178. *Maya Indigenous Communities*, *supra* note 174, ¶ 119.

the Mayan indigenous community, Belize had to comply with the duty to take measures to demarcate indigenous lands, to protect the Mayan communities' right to consultation, and to take legislative and administrative measures to ensure non-repetition and protection of the indigenous community's collective rights.¹⁷⁹

The Inter-American Commission has recognized that the discriminatory treatment of racial minority communities in relation to the environment is a persistent form of human rights violation. In *Mossville Environmental Action Now v. United States*, Advocates for Environmental Human Rights filed a petition in the Inter-American Commission on behalf of the Mossville residents in Louisiana.¹⁸⁰ Due to toxic pollution from chemical-producing industries in the area,¹⁸¹ Mossville community members had three times the national average of dioxin in their blood supply.¹⁸² The petitioners argued that they suffered "environmental racism" as an African-American community lacking true equality and effective remedies.¹⁸³ The Inter-American Commission emphasized that under international human rights law, intentional and direct discrimination is not the only prohibited discrimination. Indirect discrimination that resulted from "distinction, exclusion, restriction or preference which has a discriminatory manner" also violates environmental human rights.¹⁸⁴ This finding is an incredible step forward in the protection of communities who have suffered discrimination resulting from disparate treatment, paving the way for communities facing environmental discrimination and human rights violations to have actionable claims.¹⁸⁵

The right to nondiscrimination is key to protecting the rights of indigenous peoples, minority groups, rural communities, and other marginalized communities.¹⁸⁶ To comply with their responsibility to prevent discrimination, States must

179. *Id.* ¶ 197.

180. *Mossville Env'tl. Action Now v. United States*, Petition 242-05, Inter-Am. Comm'n H.R., Report No. 43/10 (2010) [hereinafter *Mossville*].

181. *Id.* ¶ 2.

182. *Id.* ¶ 11.

183. *Id.* ¶ 42.

184. *Id.* ¶ 43.

185. The Commission is the principal organ of the Organization of American States and has the purpose of promoting and protecting human rights in the American hemisphere. The Commission is a quasi-judicial body with three main pillars: the individual petition system; monitoring of human rights; and the development of thematic areas. *What Is the IACHR?*, INTER-AM. COMM'N H.R., <https://www.oas.org/en/iachr/mandate/what.asp> (last visited Feb. 16, 2020).

The Commission's recommendations are binding on the states that have signed the American Declaration on the Rights and Duties of Men. INT'L NETWORK FOR ECON., SOC. & CULTURAL RIGHTS [ESCR-NET], IMPLEMENTATION OF DECISIONS OF THE INTER-AMERICAN COMMISSION ON HUMAN RIGHTS 5, <https://www.escr-net.org/sites/default/files/201802-discussion-paper-of-escr-nets-strategic-litigation-working-group.pdf>.

186. Knox Report A/HRC/34/49 (Jan. 19, 2017), *supra* note 11, ¶ 9 (citing CONNECTING GLOBAL PRIORITIES at 32); *see also Framework Principles*, Knox Report A/HRC/37/59 (Jan. 24, 2018), *supra* note 10, at Annex ¶ 8 (Framework Principle 3).

take “effective measures against the underlying conditions that cause or help perpetuate discrimination.”¹⁸⁷ The principles of equality and nondiscrimination have been critical for the protection of the rights of vulnerable communities facing environmental harm.

IV. THE PROCEDURAL PROTECTIONS OF THE HUMAN RIGHT TO A HEALTHY ENVIRONMENT

Procedural rights are instrumental in protecting the right to a healthy environment. Procedural rights establish that all persons and communities have the right to access information, participate in decision-making processes, and have full and effective access to justice.¹⁸⁸ More specifically, procedural protections of the right to a healthy environment include the State’s duty “(a) to assess impacts and make environmental information public; (b) to facilitate public participation in environmental decision-making, including by protecting the rights of expression and association; and (c) to provide access to remedies for harm.”¹⁸⁹ These procedural protections arise from international environmental law and echo Principle 10 of the Rio Declaration.¹⁹⁰

A. *Right to Seek, Receive and Impart Information on Environmental Matters*

The International Covenant on Civil and Political Rights (ICCPR) provides that all persons have the right to freedom of expression, association, and assembly.¹⁹¹ These rights to association and assembly cannot be restricted and can only be suspended in times of national security, public order, public health or morals, or as to not infringe on other human rights.¹⁹² States should proactively publish information concerning the public interest and enact necessary procedures for per-

187. *Framework Principles*, Knox Report A/HRC/37/59 (Jan. 24, 2018), *supra* note 10, at Annex ¶ 9 (Framework Principle 3); see U.N. Office of the Comm. on Econ., Soc. and Cultural Rights, *CESCR General Comment No. 20: On Non-Discrimination in Economic, Social and Cultural Rights*, ¶ 10 (2009); see also *Lenahan v. United States*, Case No. 12.626, Inter-Am. Comm’n H.R., Report No. 80/11 (2011).

188. Knox Report A/HRC/34/49 (Jan. 19, 2017), *supra* note 11, ¶¶ 10, 27.

189. Knox Report A/HRC/34/49 (Jan. 19, 2017), *supra* note 11, ¶ 10; see also Rio Declaration, *supra* note 21, at Principle 10.

190. “Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.” Rio Declaration, *supra* note 21, at Principle 10.

191. ICCPR, *supra* note 62, at arts. 19, 21, 22.

192. *Id.* arts. 21, 22.

sons or communities to access that information.¹⁹³ The right to seek, receive, and impart information “should be provided without the need to prove direct interest or personal involvement in order to obtain it, except in cases in which a legitimate restriction is applied.”¹⁹⁴

The Inter-American Court has recognized the right of access to information in the context of the right to freedom of expression. In *Claude-Reyes v. Chile*, the Inter-American Court recognized that in the Inter-American System, the right to “seek” and “receive” information derives from the right to freedom of thought and expression.¹⁹⁵ The Court found that the State had a positive obligation to provide access to information through the least restrictive measures due to the importance of access to information in a democratic system. The Court established a strong connection between the public’s right to “seek” and “receive” information and their ability to participate in the democratic process.¹⁹⁶ A subsequent Inter-American Court decision, *Gomes Lund v. Brazil*, extended the scope of that right, affirming that the right to information must be timely and without undue delay so that individuals have access to the truth about human rights violations.¹⁹⁷ The European Court of Human Rights has also recognized that the right to seek and receive information includes “the right of the public to be properly informed.”¹⁹⁸ The rights to information, expression, association and assembly in relation to environmental advocacy cannot be subject to overbearing or excessive restrictions.¹⁹⁹ States may never restrict the right to information “with excessive or indiscriminate use of force, arbitrary arrest or detention, torture or other cruel, inhuman or degrading treatment or punishment, enforced disappearance, the misuse of criminal laws, stigmatization or the threats of such acts.”²⁰⁰

193. U.N. Int’l Covenant on Civil and Political Rights, Human Rights Comm., *General Comment No. 34: On Freedoms of Opinion and Expression*, U.N. Doc. CCPR/C/GC/34 (Sept. 12, 2011).

194. U.N. Int’l Covenant on Civil and Political Rights, Human Rights Comm., *Views on Communication No. 1470/2006*, U.N. Doc. CCPR/C/101/D/1470/2006 ¶ 6.3 (Mar. 28, 2011).

195. *Claude-Reyes v. Chile*, Merits, Reparations, and Costs, Judgment, Inter-Am Ct. H.R. (ser. C) No. 151, ¶ 76 (Sept. 19, 2006).

196. *Id.* ¶¶ 76-77, 87.

197. *Gomes Lund et al. v. Brazil*, Preliminary Objections, Merits, Reparations, and Costs, Judgment, Inter-Am Ct. H.R. (ser. C) No. 219, ¶ 201 (Nov. 24, 2010).

198. *Sunday Times v. United Kingdom*, App. No. 6538/74, 2 Eur. Ct. H.R. 245, ¶ 66 (1979). The European Court of Human Rights later limited the right to seek and receive information to what is now known as the Leander Principle, which means that States cannot restrict a person’s access to information that others may be willing to impart on that person. *Leander v. Sweden*, App. No. 9248/81, Eur. Ct. H.R. (Mar. 26, 1987).

199. Maina Kiai (Special Rapporteur on the Rights to Freedom of Peaceful Assembly and of Association), *Report of the Special Rapporteur on the Rights to Freedom of Peaceful Assembly and of Association*, ¶ 22, U.N. Doc. A/HRC/29/25 (Apr. 28, 2015).

200. *Framework Principles*, Knox Report A/HRC/37/59 (Jan. 24, 2018), *supra* note 10, at Annex ¶ 13 (Framework Principle 5).

The right to information concerning environmental harm is multidimensional. It requires that States without undue delay collect, update and disseminate information, including information about: the quality of the environment, including air and water quality; pollution, waste, chemicals, and other potentially harmful substances introduced into the environment; actual environmental impacts on human health and well-being; and relevant laws and policies.²⁰¹

This right to information includes the ability of the public to “seek” and “receive” environmental impact assessments, which facilitate the right to participate and be heard.²⁰² The right to be heard is inextricably linked to the ability to consent to actions that affect the lives of persons and communities where environmental harm occurs. Consent can only occur when the local population is able to make informed decisions with the benefit of all necessary information about a proposed project.²⁰³

Environmental impact assessments must be provided to the public, in a manner that is understandable and accessible, so as to provide real opportunities for meaningful participation and decision-making.²⁰⁴ The availability of environmental impact assessments that are accessible and understandable removes barriers to access to justice, and truly opens the door to what would happen “behind-closed doors” if the information was not made accessible.²⁰⁵ It is with that information that the public and affected communities can truly consent and take part in decision-making processes. As discussed above, in the case of indigenous, traditional, local or other vulnerable communities, environmental impact assessments empower these communities to offer free, prior and informed consent.

The relevance of environmental impact assessments in the protection of the right to a healthy environment extends beyond the right to information. Environmental impact assessments are instrumental to ensure that the public, and specifically communities affected by environmental harm, are taking part in and exercising autonomy over decision-making processes. A State’s failure to provide the public or affected communities with environmental impact assessments affects

201. *Id.* at Annex ¶ 18 (Framework Principle 7).

202. Environmental impact assessments are the primary mechanism with which States and private entities provide the public with information regarding the environmental and social impact of a proposed project. Environmental impact assessments evaluate the impact that State and non-state actors have on the environment, important environmental considerations in decision-making, participation and public consultations, alternatives to proposed actions affecting the environment, and possible environmental safeguards to mitigate or avoid environmental harm. *Domestic Environmental Law*, ORG. OF AM. STATES, <http://www.oas.org/dsd/tool-kit/documentos/moduleii/domestic%20Environmental%20law.pdf> (last updated Feb. 23, 2007).

203. U.N. Office of the High Comm’r for Human Rights, *CRC General Comment No. 12: On the Right of the Child to be Heard*, ¶ 87 (2009).

204. Knox Report A/HRC/31/53 (Dec. 28, 2015), *supra* note 13; ALAN GILPIN, *ENVIRONMENTAL IMPACT ASSESSMENT 2* (Cambridge Univ. Press 1994).

205. GILPIN, *supra* note 204, at 3.

their ability to have full and effective access to participatory decision-making processes resulting in the violation of human rights.

The European Court of Human Rights has recognized the importance of environmental impact assessments in *Giacomelli v. Italy*. In *Giacomelli*, the European Court emphasized that environmental impact assessments were essential for the protection of human rights where environmental harm was involved.²⁰⁶ More specifically, the European Court emphasized that environmental impact assessments were imperative to ensure access to information and proper decision-making processes.²⁰⁷ Additionally, the International Court of Justice (ICJ) recognized in the *Pulp Mills Case*, that environmental impact assessments must be used to determine the nature and magnitude of development projects and their likely environmental harms.²⁰⁸ The ICJ did not provide guidance as to the scope and content of such environmental impact assessments, but indicated that it was up to each State to determine.²⁰⁹ The ICJ did recognize that under international law, environmental impact assessments must be conducted prior to the implementation of a project, and that these assessments must be continuous.²¹⁰

B. Taking Part and Exercising Autonomy

Under international human rights law, all persons and communities have the right to freely determine their economic, social, and cultural development.²¹¹ Traditionally, the right to self-determination has been focused on the protection of “peoples” to exercise autonomy over their lives and overall development.²¹² Self-determination ensures that a group is able to make decisions as a collective about the conditions that shape their lives.²¹³ Meaningful ability to make decisions requires that peoples have a proactive participatory role in decision-making processes

206. *Giacomelli v. Italy*, 45 Eur. Ct. H.R. 38, ¶ 94 (2006).

207. *Id.* ¶ 83.

208. *Pulp Mills on the River Uruguay (Arg. v. Uru.)*, Judgment, 2006 I.C.J. Rep. 14, ¶ 205 (Apr. 20).

209. *Id.*

210. *Id.*

211. ICCPR, *supra* note 62, at art. 1(1); ICESCR, *supra* note 92, at art. 1(1); *see also* U.N. Charter art. 1, ¶ 2.

212. “All peoples” has been defined as a group of individuals who enjoy some or all of the following common features: a common historical tradition; racial or ethnic identity; cultural homogeneity; linguistic unity; religious or ideological affinity; and territorial connection, among others. MILENA STERIO, *THE RIGHT TO SELF-DETERMINATION UNDER INTERNATIONAL LAW* 16-17 (2012); *see also* BISAZ CORSIN, *CONCEPT OF GROUP RIGHTS IN INTERNATIONAL LAW* 45 (2012).

213. Cindy Holder, *Self-Determination as a Universal Human Right*, 7 HUMAN RIGHTS REV. 5, 8 (2006).

that affect their lives. The right to self-determination is of incredible importance to the realization, effective guarantee, and observance of other human rights.²¹⁴

In the environmental context, the right to self-determination requires that persons and communities have the right to take part in decision-making processes relating to environmental matters.²¹⁵ In order to be able to make affirmative decisions, States must provide “objective, understandable, timely and effective” information about environmental impacts.²¹⁶ States have the obligation to ensure that there is an existing and accessible legal framework in which the public and affected communities are given the opportunity to comment, directly or through representatives, on the information that the government or private entities have provided.²¹⁷ In addition, this process of effective participation must include a variety of stakeholders, including State and non-state actors, private entities, civil society, and affected populations.²¹⁸ Special attention must be given to the effective participation of women, gender-minorities, indigenous peoples, and other disenfranchised vulnerable populations.²¹⁹

In *Bernard Ominayak and the Lubicon Lake Band v. Canada*, the United Nations Human Rights Committee (Human Rights Committee), considered whether the Canadian government had violated the human rights of the Lubicon Lake Band community.²²⁰ The Human Rights Committee recognized that the right to self-determination and the right of a people to dispose of its natural resources are pre-conditions to the effective guarantee and enjoyment of other human rights, including individual rights.²²¹ However, the Human Rights Committee also recognized that individuals could not successfully make claims under the Optional Protocol to the International Covenant on Civil and Political Rights for collective rights.²²² In

214. U.N. Int'l Covenant on Civil and Political Rights, Human Rights Comm., *CCPR General Comment No. 12: On the Right to Self-Determination of Peoples*, U.N. Doc. HRI/GEN/1/Rev.1 (1994).

215. *Framework Principles*, Knox Report A/HRC/37/59 (Jan. 24, 2018), *supra* note 10, at Annex ¶ 23 (Framework Principle 9).

216. UNEP, *Guidelines for the Development of National Legislation on Access to Information, Public Participation and Access to Justice in Environmental Matters*, 7, U.N. Doc. A/65/25 (Feb. 26, 2010) [hereinafter UNEP Guidelines].

217. Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters art. 8, June 25, 1998, 2161 U.N.T.S. 447 [hereinafter Aarhus Convention].

218. G.A. Res. 67/210, ¶ 12 (Dec. 21, 2012).

219. *Id.*

220. U.N. Int'l Covenant on Civil and Political Rights, Human Rights Comm., *Lubicon Lake Band v. Canada*, Communication CCPR/C/38/D/167/1984, ¶¶ 2.2-2.3 (Mar. 26, 1990) (“The Lubicon Lake Band is a self-identified and relatively autonomous group that has continuously lived and occupied their territory. The Lubicon Lake Band has historically hunted, trapped and fished, and maintain their traditional language and culture, practice their own religion, follow their own political structure, and rely on substance economy.”).

221. *Id.* ¶ 13.3.

222. *Id.*

other words, individuals do not have claims to collective rights unless they belong to a “people” with collective rights. If individuals do not belong to a “people,” their exercise of human rights must be through their individual human rights.

Similar to the Human Rights Committee’s decision in *Lubicon Lake Band*, the African Commission on Human and Peoples’ Rights in *Centre for Minority Rights Development (Kenya) v. Kenya* examined whether the Endorois was considered an indigenous community and a “people” under the African Charter on Human Rights as a pre-condition to finding that their collective human rights had been violated. The African Commission recognized that the Endorois was indeed an indigenous community and a “people” because they had a common history, culture, and religion.²²³ Because they qualified as a “people” under the Commission’s definition, the Endorois had a right to the lands they occupied and used, to dispose of their natural resources, and property.²²⁴ In addition, the African Commission found that their rights were violated due to their inability to engage in effective participation and lacked access to environmental impact assessments.²²⁵ Kenya owed the Endorois a duty to consult with the community, and to obtain free, prior, and informed consent prior to carrying out a development project.²²⁶

Furthermore, *Saramaka People v. Suriname* concerned logging and mining concessions that the State of Suriname made to private entities without the free, prior, and informed consent of the Saramaka people.²²⁷ Notably, the Court found that although the Saramaka did not constitute a traditional indigenous community, their deep ties to the land they had occupied since the 1700s enabled them to assert community property rights, as well as rights to their natural resources and environment.²²⁸

Similar to indigenous communities, traditional and local communities have the right to an effective remedy, including the right to restitution, just, fair and

223. Ctr. for Minority Rights Dev. (Kenya) and Minority Rights Grp. Int’l (*ex rel.* Endorois Welfare Council) v. Kenya, Communication 276/2003, Afr. Comm’n H.P.R., ¶ 162 (Feb. 4, 2010), https://www.achpr.org/public/Document/file/English/achpr46_276_03_eng.pdf.

224. *Id.* ¶¶ 290, 295.

225. The African Commission on Human and Peoples’ Rights found that Kenya had violated the Endorois’ human rights under article 1 (obligation of state parties), article 8 (right to practice religion), article 14 (right to property), article 17 (right to culture), article 21 (right to freely dispose of wealth and natural resources) and article 22 (right to development) of the African Charter on Human and Peoples’ Rights. *Id.* ¶¶ 266, 281.

226. *Id.* ¶ 291.

227. *Saramaka People v. Suriname*, Preliminary Objections, Merits, Reparations, and Costs, Judgment, Inter-Am. Ct. H.R. (ser. C) No. 172, ¶ 124 (Nov. 28, 2007).

228. *Id.* ¶ 85. See also U.N. Int’l Covenant on Civil and Political Rights, Human Rights Comm., *Länsman v. Finland*, Communication CCPR/C/52/D/511/1992, ¶ 9.5 (Nov. 8, 1994) (finding by the U.N. Human Rights Committee that although the Sami people in Finland did not fit the definition of “indigenous,” they were still entitled to assert community rights to the protection of their land as a minority group).

equitable compensation, and the right to non-repetition.²²⁹ The right to “community participation” has been widely documented as a collective right accessible to minority groups or other forms of non-indigenous groups.²³⁰ The Human Rights Committee found in the case of *Länsman v. Finland*, that the Sami people in Finland were entitled to minority group protections despite not being an “indigenous” community within the meaning of the ICCPR.²³¹ The Committee recognized that the Sami people had the right to preserve their culture and traditional economic livelihood, and to be consulted prior to development projects taking place in their lands. The Human Rights Committee emphasized that measures must be taken “to ensure the effective participation of members of minority communities in decisions which affect them.”²³²

As evidenced by the *Saramaka* and *Länsman* cases and recognition by experts in the field, traditional or local communities have the right to be consulted when States are considering legislative or administrative measures affecting their environment, the exploration or exploitation of resources, or transferring of rights to persons or entities outside of their own community.²³³ Part of that consultation must include the receipt of environmental impact assessments detailing environmental and social impacts of a proposed project.²³⁴ Free, prior, and informed consent ensures that the affected communities are able to exercise their right to equality under the law, access to justice, property, and other rights in relation to the protection of their culture, religion, and overall preservation.²³⁵ States must ensure that all affected communities, and particularly traditional, local, minority, or vulnerable communities, have real and effective participation. Such participation, and overall enjoyment of the right to a healthy environment, must be free from discrimination.²³⁶ Equality and nondiscrimination are necessary to ensure the ability of a community to enjoy their right to self-determination when taking part in decision-making processes and exercising their autonomy.

229. *Framework Principles*, Knox Report A/HRC/37/59 (Jan. 24, 2018), *supra* note 10, at Annex ¶ 53 (Framework Principle 15).

230. *Ctr. for Minority Rights Dev. (Kenya) and Minority Rights Grp. Int'l (ex rel. Endorois Welfare Council) v. Kenya*, Communication 276/2003, Afr. Comm'n H.P.R., ¶ 228 (Feb. 4, 2010), https://www.achpr.org/public/Document/file/English/achpr46_276_03_eng.pdf; Banjul Charter, *supra* note 10, at art. 17; G.A. Res. 47/135, at art. 2.5 (Dec. 18, 1992); U.N. Int'l Covenant on Civil and Political Rights, Human Rights Comm., *General Comment* 23, ¶ 7, U.N. Doc. CCPR/C/21Rev.1/Add5 (Apr. 8, 1994).

231. *Länsman*, CCPR/C/52/D/511/1992, ¶ 9.3.

232. *Framework Principles*, Knox Report A/HRC/37/59 (Jan. 24, 2018), *supra* note 10, ¶ 50 (Framework Principle 15).

233. *Id.*

234. *Id.*

235. *Dann v. United States*, Case 11.140, Inter-Am. Comm'n H.R., Report No. 75/02, doc. 5 rev. ¶ 131 (2002).

236. *Id.*

C. *Effective Remedies for Vulnerable Persons, Including Children, Girls, and Women of Reproductive Age, and Others in the Community*

All persons whose human rights have been violated have the right to an effective remedy.²³⁷ An effective remedy is one that can be obtained through competent judicial or quasi-judicial, administrative, or legislative mechanisms.²³⁸ The right to an effective remedy includes 1) the right to equal and effective access; 2) adequate, effective, and prompt reparations; and 3) access to relevant information regarding harms that could lead to violations of human rights and mechanisms available.²³⁹ “Reparations” for violations of human rights have included, restitution, compensation, rehabilitation, satisfaction, and guarantees of non-repetition.²⁴⁰

Violations of the right to a healthy environment and interrelated rights require States to ensure effective remedies are prompt, that they address the harms committed, and that they are understandable and accessible to the persons or communities affected.²⁴¹ Timeliness is an essential aspect of an effective remedy. Timely remedies ensure that the harm is promptly redressed, sometimes through injunctive relief to ensure non-repetition.²⁴² Additionally, States must take all appropriate measures, including legislation, regulations, and modifying customs or practices, to end the discrimination of vulnerable populations.²⁴³ In the case of indigenous, traditional, rural, or disenfranchised communities, States must guarantee the rights of ownership, possession and effective representation, while ensuring that such communities are able to provide free and informed consent to actions taken on their land.²⁴⁴

In the case of children, effective remedies must take into account their special needs, risks, and capacity to comprehend information.²⁴⁵ Effective remedies must

237. American Convention on Human Rights “Pact of San José, Costa Rica” art. 25, Jan. 22, 1969, 1144 U.N.T.S. 123; Banjul Charter, *supra* note 10, at art. 7; ICCPR, *supra* note 62, at art 2; Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment art. 14, Dec. 10, 1984, 1465 U.N.T.S. 85 [hereinafter CAT]; Convention on the Elimination of All Forms of Discrimination Against Women art. 2, Dec. 18, 1973, 1249 U.N.T.S. 13 [hereinafter CEDAW].

238. G.A. Res. 217 (III) A, Universal Declaration of Human Rights art. 8 (Dec. 10, 1948); ICCPR, *supra* note 62, at art. 2(3); *see also* Lenahan v. United States, Case No. 12.626, Inter-Am. Comm’n H.R., Report No. 80/11 (2011).

239. G.A. Res. 60/147 (Mar. 21, 2006) [hereinafter Basic Principles on Right to a Remedy and Reparation].

240. *Id.* ¶ 7; U.N. Int’l Covenant on Civil and Political Rights, Human Rights Comm., Carlos Dias v. Angola, Communication CCPR/C/68/D/711/1996 ¶¶ 1, 6 (Mar. 20, 2000).

241. Rio Declaration, *supra* note 21, at Principle 10; Basic Principles on Right to a Remedy and Reparation, *supra* note 239, ¶ 14; *see also* Déés v. Hungary, App. No. 2345/06, Eur. Ct. H.R. ¶ 27 (2010) (finding that for remedies to be effective, they must be provided within a “reasonable time”).

242. Aarhus Convention, *supra* note 217, at art. 9(4).

243. CEDAW, *supra* note 237, at art. 2; U.N. Declaration on Indigenous Peoples, *supra* note 17, at art. 17(2)-(3).

244. ILO Convention No. 169, *supra* note 83, at arts. 12, 14.

245. Tuncak Report A/HRC/33/41, *supra* note 49, ¶ 39.

be “child-sensitive mechanisms—criminal, civil or administrative—that are known by children and their representatives, that are prompt, genuinely available and accessible and that provide adequate reparation for harm suffered.”²⁴⁶ More specifically, the right to an effective remedy must include “remediation of contaminated sites, the cessation of actions or inactions that give rise to impacts, the provision of health care, and the dissemination of information to ensure that parents and children know how to prevent recurrence.”²⁴⁷ In addition, States must ensure that children have access to effective remedies in the form of medical and psychological assistance, information about harm or future possible harm, legal services and support, rehabilitation services, and above all, guarantees of non-repetition.²⁴⁸ Providing access to information is particularly important, because children often carry the burden of proving that toxic chemicals, pollution, or environmental conditions were the cause of their injuries.²⁴⁹ Proving “[c]ausation presents a largely insurmountable obstacle to remedy” that renders children unable to enjoy their right to an effective remedy.²⁵⁰ Victims of environmental harm are often left to prove that the contamination that they have been exposed to is the cause of their injury, but lack adequate, accessible information about the damage done. This creates an unjust burden of proof on those seeking a remedy. Without accessible proof of causation, the environmental harm continues, and their right to an effective remedy—such as restitution, compensation, rehabilitation, and guarantee of non-repetition—continue to be violated.

V. CASE STUDY: PROTECTING THE HUMAN RIGHTS OF PUERTO RICANS SUFFERING FROM ENVIRONMENTAL HARM RESULTING FROM EXPOSURE TO COAL-ASH

Communities in Puerto Rico have been rising up against egregious environmental contamination by AES, a private American company that has been supported and protected by the government of Puerto Rico.²⁵¹ While this contamination and environmental harm has taken place over the last decade, Puerto Ricans have been exposed to serious environmental harm since the 1950s.²⁵² In 1950, Governor Luis Muñoz Marín developed “Operación Manos a la Obra” (Operation

246. U.N. Office of the High Comm’r for Human Rights, *CRC General Comment No. 16 On State Obligations Regarding the Impact of the Business Sector on Children’s Rights*, ¶ 30, U.N. Doc. CRC/C/GC/16 (Apr. 17, 2013) [hereinafter General Comment No. 16].

247. Tuncak Report A/HRC/33/41, *supra* note 49, ¶ 40.

248. General Comment No. 16, *supra* note 246, ¶ 31.

249. Tuncak Report A/HRC/33/41, *supra* note 49, ¶ 12.

250. *Id.* ¶ 42.

251. See Michelle Chen, *Confronting Puerto Rico’s Coal-Ash Crisis*, NATION (Mar. 13, 2019), <https://www.thenation.com/article/puerto-rico-coal-ash/>.

252. See, e.g., *Operation Bootstrap Score: 400th New Factory. Industry Overtakes Agriculture in Puerto Rico’s Drive to Expand*, LIFE, May 21, 1956, at 38-43.

Bootstrap), which sought to industrialize Puerto Rico and bring foreign investment capital to the island. The 1950s were viewed as an “economic miracle,” where Puerto Rico saw the expansion of urbanization, paved roads, automobiles, and the resulting displacement of communities in the name of modernity.²⁵³ During this time, the Puerto Rican economy was heavily invested in manufacturing and mining.²⁵⁴ Private mining companies used open-pit mining, which had environmentally disastrous effects by exposing radioactive elements, asbestos-like minerals and metallic dust, which leached into the bedrock.²⁵⁵ This mining exploitation took place in Adjuntas, Jayuya, and Utuado, primarily rural and poor communities.²⁵⁶

As a response to the open-pit mining and contamination of the 1950s and 1960s, an environmental justice movement in Puerto Rico was born.²⁵⁷ According to geologist Pedro Gelabert, the mining operations were extremely secretive.²⁵⁸ Exploration permits had been granted to American Metal Climax Inc. and Bear Creek Mining Company.²⁵⁹ Throughout the process in which the Puerto Rican government granted exploration permits, companies established their presence in Puerto Rico and engaged in environmentally harmful activities.²⁶⁰ Meanwhile, the public was left in the dark about the inner workings of the government contracting process. The public did not have access to information about the companies, their operations, or the resulting environmentally hazardous activities in the area.²⁶¹ The disenfranchisement of the local population, suppression of activists speaking out against the government, destruction of the environment, overall dissatisfaction with Puerto Rico’s colonial status, and desire for sovereignty over Puerto Rican

253. *Id.*

254. Carmen Concepción, *The Origins of Modern Environmental Activism in Puerto Rico in the 1960s*, 19 INT’L J. URB. & REG’L RES. 112, 112-13, 115 (1995).

255. Edeltrauda Helios Rybicka, *Impact of Mining and Metallurgical Industries on the Environment in Poland*, 11 APPLIED GEOCHEMISTRY 3, 3-9 (1996).

256. U.S. DEP’T OF COMMERCE, 1969 CENSUS OF AGRICULTURE PART 51 GUAM, A-4 (1972).

257. FÉLIX CÓRDOVA ITURREGUI ET AL., EL PROYECTO DE EXPLOTACIÓN MINERA EN PUERTO RICO (1962-1968): NACIMIENTO DE LA CONCIENCIA AMBIENTAL MODERNA 15-23 (Río Piedras: Ediciones Huracán, 2014).

258. PEDRO GELABERT, MINERÍA EN PUERTO RICO 5 (Aug. 24, 2011), http://www.recursosaguapuertorico.com/Mineria_en_Puerto_Rico_por_Pedro_Gelabert_PDF.pdf?fbclid=IwAR3k-EeNc9C40yw48GvNsfpV1f632k-GANxHcVgnJZxLDgvt0gANHvS-Dz8.

259. *Id.* at 4.

260. See NEFTALI GARCIA MARTÍNEZ, PUERTO RICO Y LA MINERÍA 23-24, 35-38 (Ediciones Librería Internacional, 1972), <http://ut.pr/biblioteca/elibros/Puerto%20Rico%20y%20la%20Minera.pdf>; Miguel Alvelo-Rivera, *From Nationalists to Environmentalists: The Puerto Rican Environmental Movement and Social Movement Spillover Theory*, 10 McNair Scholars J. U. WIS.-SUPERIOR 78, (2009), <https://minds.wisconsin.edu/bitstream/handle/1793/75948/From%20Nationalists%20to%20Environmentalists%20The%20Puerto%20Rican%20Environmental%20Movement%20and%20Social%20Movement%20Spillover%20Theory%20by%20Miguel%20Alvelo-Rivera.pdf?sequence=7&isAllowed=y> [hereinafter Alvelo-Rivera].

261. Alvelo-Rivera, *supra* note 260, at 78.

natural resources, cumulatively sparked the beginning of environmental justice movements in Puerto Rico.²⁶²

The environmental justice movement in Puerto Rico is closely tied to the independence movement.²⁶³ Since its beginning it has identified the need to have autonomy and sovereignty over decision-making, and ownership and control of natural resources—thus reflecting a desire by the Puerto Rican people to exercise their right to self-determination.²⁶⁴ For example, in the activism against environmental harms from the mining industry, the slogan “Minas Boricuas, o Cero Minas” (“Puerto Rican Mines, or No Mines”) took over the discourse.²⁶⁵ This slogan was highly nationalistic and part of a broader nationalist and pro-independence movement.²⁶⁶ During that period of time, communities, movement activists, and unaffiliated “progressive” individuals participated in protests and organized to push an environmental justice agenda.²⁶⁷ From the 1950s through the 1980s, political dissidents, activists, students, journalists, and others were repressed under the auspices of the “Ley de Mordaza,” (Gag Law, Law 53 of 1948), which limited the freedom of association and expression in Puerto Rico.²⁶⁸ The former Chief Justice of the Supreme Court of Puerto Rico, José Trías Monge, insisted that the island lived “under the shadow of this law.”²⁶⁹

In the 1960s, environmental justice groups continued their fight against private companies contaminating Puerto Rico.²⁷⁰ The Commonwealth Refining Company (CORCO) in Peñuelas was yet another example of a company polluting the local environment. CORCO refined 161,000 barrels of oil daily in Puerto Rico,²⁷¹ producing gasoline, kerosene, jet fuel, diesel, fuel oils, propane, butane, and

262. During this time, we see the environmental justice movement led by Movimiento Pro-Independencia, Vanguardia Popular, Misión Industrial, are seeking to press for transparency and for the limitation of the exploitation of exploration and mining projects. *Id.*

263. *Id.* at 78.

264. *See id.* at 83.

265. *Id.* at 84.

266. *Id.* (“This slogan is exemplary of the spillover of nationalism and “independentismo” in the environmental movement”); *see also* Nefthalí García, *Apuntes para una Historia de la Lucha Ambiental, Misión Industrial de Puerto Rico, Inc.* (1984) (unpublished manuscript).

267. *See* Alvelo-Rivera, *supra* note 260, at 81-82 (citing David S. Meyer & Nancy Whittier, *Social Movement Spillover*, 41 SOC. PROBS. 277, 291 (1994)).

268. IVONNE ACOSTA, *LA MORDAZA: PUERTO RICO (1948-1957)* 15, 122 (Editorial Edil, et al., 2008). The authors illustrate how La Ley de Mordaza criminalized any expressions of patriotism, or any actions, declarations, or statements made in favor of Puerto Rico’s independence.

269. *La Ley de la Mordaza Sigue Vigente*, EL MUNDO, Aug. 5, 1987, <http://www.latinamericanstudies.org/exile-pr/Mundo-8-5-1987-3.pdf>.

270. Harrison Flores Ortiz, *Breve Historia Ambiental de Puerto Rico*, ENCICLOPEDIA DE PUERTO RICO (Feb. 23, 2016), <https://enciclopediapr.org/encyclopedia/breve-historia-ambiental-de-puerto-rico/>.

271. Benjamín Torres Gotay, *El Vertedero de Puerto Rico*, EL NUEVO DÍA (July 16, 2017), <https://www.elnuevodia.com/opinion/columnas/elvertederodepuertorico-columna-2340787/>.

other petroleum byproducts. CORCO closed its doors at the end of the 1970s after using up its tax exemptions under the Industrial Incentives Law of 1947.²⁷² After CORCO shut down its operation, the power plant's infrastructure was left to decay.²⁷³ Due to the infrastructure's decay, there has been a massive industrial contamination of the air, water, and ground, contaminating the underground aquifers of southern Puerto Rico.²⁷⁴ Environmental defenders have fought for the clean-up and decontamination of the abandoned industrial areas, clandestine landfills, toxic discharges into the sea, and illegal cadaver incinerators in that area.²⁷⁵ After much advocacy by environmental justice groups, CORCO was ordered to clean up.²⁷⁶

Between 1987 and 1990, environmental justice movements in Puerto Rico were opposed to coal-based power plants (plantas carboneras). During this time, in Mayagüez, the company Cogentrix-Endesa sought to install a coal-based power plant to supply energy in Puerto Rico.²⁷⁷ The Mayagüezanos por la Salud y el Ambiente and Misión Industrial, environmental defenders in Mayagüez, allied themselves with local unions and community and political organizations to advocate against the use of coal for energy production and its byproduct, coal-ash.²⁷⁸ This coalition of diverse environmental defenders engaged in an aggressive campaign that sought to disseminate information regarding the harmful effects of coal-ash on people's health.²⁷⁹ The coalition visited and consulted with communities and organized protests expressing the public's opposition to the installation of this power

272. The Industrial Incentives Law of 1947 provided foreign or American companies with tax exemptions up to \$100 million. See P.R. Laws Ann. tit. 13, § 10001 (1954); Catalina M. de Onís, *For Many in Puerto Rico, 'Energy Dominance' Is Just a New Name for US Colonialism*, THE CONVERSATION (Aug. 21, 2017), <https://theconversation.com/for-many-in-puerto-rico-energy-dominance-is-just-a-new-name-for-us-colonialism-80243>.

273. Torres Gotay, *supra* note 271.

274. Arq. María M. Rivera Grau, *La Ecoindustria: Un Nuevo Capítulo en la Historia de las Antiguas Refinerías y Petroquímicas del Sur*, REVISTA AMBIENTAL CORRIENTE VERDE, Aug. 2012, at 62-64.

275. *Id.* at 64; see also, *Hazardous Waste Cleanup: Commonwealth Oil and Refining Company, Incorporated in Peñuelas, Puerto Rico*, ENVTL. PROT. AGENCY (last updated Feb. 2006), www.epa.gov/hwcorrectiveactionsites/hazardous-waste-cleanup-commonwealth-oil-and-refining-company-incorporated [hereinafter *Hazardous Waste Cleanup*] (describing the extent of pollution at the CORCO site).

276. This cleanup process has lasted decades, and is still ongoing. *Hazardous Waste Cleanup*, *supra* note 275 (describing CORCO hazardous waste cleanup effort).

277. José Anazagasty Rodríguez, *La Historia de Nuestras Controversias Energéticas*, 80 GRADOS PRENSA SIN PRISA (Aug. 31, 2012), <http://www.80grados.net/las-plantas-carboneras-y-la-historia-de-nuestras-controversias-energeticas/>.

278. *Id.*

279. See PUERTO RICO Y LOS DERECHOS HUMANOS: UNA INTERSECCIÓN PLURAL 201-07 (J. Javier Colón Morena & Idsa E. Alegría Ortega, eds., Ediciones Callejón, 2012), https://www.academia.edu/10997133/Puerto_Rico_y_los_derechos_humanos_Una_interseccion_plural.

plant.²⁸⁰ The efforts of this broad coalition resulted in the abandoning of the Cogentrix-Endesa coal-based power plant, marking a great victory for the environmental justice movement in Puerto Rico.²⁸¹

However, in 1993, AES heavily lobbied the government of Puerto Rico and local communities so that it could install its power plant. AES worked in conjunction with the government of Puerto Rico to push forward a campaign of an alleged “clean, ecological and financially sustainable” option for Puerto Rico’s energy needs.²⁸² In 1993, then-Governor Pedro Roselló González signed Executive Order 1993-57, which declared that Puerto Rico’s energy needs were a priority, and that it was necessary to consider fuel alternatives that represented financially sustainable and environmentally safe electric energy sources.²⁸³ He declared that consideration of alternative sources for electricity must account for environmental, health, and financial security concerns.²⁸⁴ In that same order, it called upon the Department of Natural Resources in Puerto Rico (Recursos Naturales y Ambientales) to engage in a process of public consultation to develop a strategic plan for public energy policy.²⁸⁵ Without real or meaningful consultation with the public, AES obtained a 25-year contract with the Autoridad de Energía Eléctrica.²⁸⁶ The government misled the public through a campaign for “clean, ecological and sustainable” energy, when in reality it was facilitating an environmentally harmful industry that would affect the lives of Puerto Ricans.²⁸⁷

In reality, there was no open or transparent consultation process where the public or communities affected were consulted about the government’s public en-

280. Iván Vargas Muñiz, *La Columna de Iván: La Planta de Carbón . . . Crónica de una Contaminación Anunciada*, LA CALLE, (Mar. 29, 2016), <http://lacallerevista.com/portada/la-columna-de-ivan-la-planta-de-carbon-cronica-de-una-contaminacion-anunciada/31283>.

281. *Cabot LNG Corp. v. Puerto Rico Electric Power Authority*, 922 F. Supp. 707, 711 n.4 (D.P.R. 1996).

282. *See id.* at 710-12; Gobernador del Estado Libre Asociado de Puerto Rico, Orden Ejecutiva No. 1993-57, Boletín Administrativo Núm. OE-1993-57, at 2-3 (Gov. of P.R., Exec. Order No. 1993-57) (Dec. 28, 1993) (hereinafter P.R. Exec. Order No. 1993-57).

283. *Id.*

284. *Id.*

285. *Id.* at 3.

286. The parties present in the Committee for “Cogeneración y generación de energía” were Junta de Planificación, Autoridad de Acueductos y Alcantarillados, Autoridad de Energía Eléctrica, Junta de Calidad Ambiental, Compañía de Fomento, Autoridad de Desperdicios Sólidos, Departamento de Recursos Humanos, y el Departamento de Energía Federal. COMITÉ DE COGENERACIÓN, *supra* note 2; AES Agreement, *supra* note 2. In a statement by the subsequent governor, Sila María Calderón, there is an acknowledgement that the public was not consulted or provided a meaningful opportunity to participate. “La reciente reevaluación del Plan Regional [de 1995] evidencia que en éste no se implantaron criterios adecuados en la ubicación de los proyectos propuestos, que dicho Plan Regional contiene proyectos innecesarios y que no incorporó la participación pública, municipal o interagencial en la ubicación de los proyectos.” Luis E. Rodríguez Rivera, *La Incineración de Basura en Puerto Rico: La Máquina Sigue Patinado*, 85 REV. JUR. UPR 1, 16 (2016).

287. *See* P.R. Executive Order No. 1993-57, *supra* note 282.

ergy policy.²⁸⁸ Right after AES obtained the government contract to produce coal-based energy, it started pursuing local activists in the communities where it sought to place its power plant and convinced them of the economic benefits that would accrue to local communities.²⁸⁹ In doing so, AES ensured that the Puerto Rican government and communities in southern Puerto Rico would approve the installation of the AES power plant. AES identified Víctor Rodríguez Aguirre, a resident of the Santa Ana sector of barrio Jobos (Jobos neighborhood) in Guayama.²⁹⁰ Mr. Rodríguez Aguirre was a strong advocate of sports involvement for youth in his community. They knew of his influence and convinced him of the benefits of having AES near the community. AES convinced Mr. Rodríguez Aguirre that the power plant would be a great source for job opportunities, sponsorship of community events such as children's baseball teams, and other financial benefits. By working with the barrio Jobos in Guayama, AES gave the impression that the local community was being consulted. At the time, AES assured the Puerto Rican government as a pre-condition to the plant installation that the coal-ash produced would not be disposed of anywhere in Puerto Rico.²⁹¹ "They took us to Hartford, Connecticut, to see the AES facilities . . . and what we saw there was very positive; it was in line with what we had been told would be established here in Puerto Rico."²⁹² But the result was very different from what AES assured local communities would come to pass.

In 1994, AES inaugurated its power plant and immediately started generating coal-based energy. As per the original agreement with the government of Puerto Rico, coal-ash could not remain or be disposed of in Puerto Rico unless it was used for a beneficial use.²⁹³ In 1996, the Environmental Quality Board of Puerto Rico passed a resolution stating that AES had agreed that it would collect, store, and transfer the coal-ash it produced outside of Puerto Rico.²⁹⁴

288. *See id.*

289. Omar Alfonso, *Prometieron Empleos . . . Y Trajeron Cenizas*, CENTRO DE PERIODISMO INVESTIGATIVO (Mar. 8, 2016), <http://periodismoinvestigativo.com/2016/03/prometieron-empleos-y-trajeron-cenizas/>.

290. *Id.*

291. *See* AES Agreement, *supra* note 2; Ruth Santiago, *Imminent and Substantial Endangerment to Human Health and the Environment from Use of Coal Ash as Fill Material at Construction Sites in Puerto Rico: A Case Study*, 37 *PROCEDIA – SOC. & BEHAVIORAL SCI.* 389, 392 (2012).

292. Alfonso, *supra* note 289.

293. AES Agreement, *supra* note 2. Coal-ash is the waste left over from burning of the coal and after it has been combusted. The most common forms of coal-ash are: (1) fly-ash, a very fine, powdery material; (2) bottom ash, a coarse particle that forms in the bottom of the coal furnace; (3) boiler slag, that is molten bottom ash; (4) flue gas, that that can be a wet sludge composed of calcium sulfite or calcium sulfate, or a dry powered material that can be a mixture of both the sulfites and sulfates. *See Coal Ash Basics*, EPA, <https://www.epa.gov/coalash/coal-ash-basics> (last visited Mar. 5, 2018).

294. Junta de Calidad Ambiental (Environmental Quality Board), Response to Request for Interpretation of the Applicability of Rules 103, 1002, 1003, and 1005 to the Generation of Ash and Production of Manufactured Aggregate by AES, R-69-39-1 (Oct. 31, 1996). The Environmental Quality

Since AES could not dispose of its coal-ash in Puerto Rico, it disposed of it in Dominican Republic. Specifically, it dumped coal-ash at or near Arroyo Barril, a poor, coastal, rural community.²⁹⁵ Residents from the area remember seeing tons of coal-ash, or “rockash,” that were left in the Juan Pablo Duarte Dock, and washed up on the coast for years.²⁹⁶ As a result of the contamination, coal-ash ended up in critical water sources, food sources, crops, and homes throughout the community.²⁹⁷ The residents of Arroyo Barril suffered from serious health effects, including respiratory problems and skin lesions. They also suffered from serious reproductive health issues, including high numbers of miscarriages, babies born with serious health conditions and defects—such as exposed intestines—a high number of cancer incidences, and other serious conditions.²⁹⁸ Arroyo Barril communities saw a decline in their ability to fish and produce crops, thus raising food security concerns.²⁹⁹ The disastrous effects of the coal-ash placed local economies in a critical condition by destroying local resources, goods sold and used for subsistence, and local tourism.³⁰⁰

Two years after AES began dumping coal-ash in the Dominican Republic, the Dominican Republic sued several American companies, including AES Puerto Rico, seeking “compensatory and punitive damages for environmental damages (including removing the ash, restoring local ecology, and monitoring cleanup), healthcare costs for injured residents, and economic damages for the loss of tourism.”³⁰¹ Dominican Republic argued that the mismanagement and dumping of coal-ash resulting in the contamination of the environment and natural resources in

Board (EQB) of Puerto Rico (“Junta de Calidad Ambiental” in Spanish) is the primary environmental protection regulatory agency in Puerto Rico. The EQB is tasked with regulating the solid waste landfills in Puerto Rico and issuing permits to waste-producing companies, such as AES. The Environmental Protection Agency under the U.S. federal government delegates local authority to the EQB to handle environmental regulation in Puerto Rico and only intervenes in instances of serious environmental and health risks and violations under the Resource Conservation and Recovery Act. Kyle Plantz, *Puerto Rico’s Landfill Governing Authority Says They Do Not Inspect All Landfills on the Island*, INSIDE SOURCES (Oct. 17, 2016), <http://www.insidesources.com/puerto-ricos-landfill-governing-authority-says-they-do-not-inspect-all-landfills-on-the-island/>.

295. Alfonso, *supra* note 289.

296. See Omar Alfonso, *Arroyo Barril: Coal Ash and Death Remain 15 Years Later*, CENTRO DE PERIODISMO INVESTIGATIVO (Dec. 20, 2018), <http://periodismoinvestigativo.com/2018/12/arroyo-barril-coal-ash-and-death-remain-15-years-later/>.

297. *Id.*

298. Omar Alfonso, *Something Happened in Arroyo Barril*, CENTRO DE PERIODISMO INVESTIGATIVO (Mar. 2, 2016), <http://periodismoinvestigativo.com/2016/03/something-happened-in-arroyo-barril/>.

299. *Id.*

300. See Frances Robles, *Coal Ash From U.S. Blamed for Dominican Town’s Birth Defects*, MCCLATCHY DC (Nov. 9, 2009), <http://www.mcclatchydc.com/news/nation-world/world/article24563092.html>; *Dominican Republic v. AES Corp.*, 466 F. Supp. 2d 680, 686 (E.D. Va. 2006).

301. *Dominican Republic v. AES Corp.*, 466 F. Supp. 2d at 686.

Manzanillo and Samana Bay.³⁰² The dumping caused serious health issues in the affected communities, overburdened the state-run healthcare system, and harmed the local economy.³⁰³ In its complaint, Dominican Republic argued that AES (with other private enterprises) had engaged in bribery and death threats in order to dispose of the hazardous coal-ash that was produced in Puerto Rico.³⁰⁴ As a result of that complaint, AES settled with the Dominican Republic for \$6 million to clean up the contamination.³⁰⁵ Subsequently, in 2009, the residents of Arroyo Barril filed a civil suit in Delaware against AES and four of its subsidiaries, alleging that they were wrongfully exposed “to reproductive, carcinogenic and other toxins in the Coal Ash Waste, either directly or in utero, and as a result [they] suffered catastrophic injuries, including grotesque malformations and death.”³⁰⁶ While the plaintiffs sought around \$30 million in damages, AES settled the case for an undisclosed sum.³⁰⁷

Despite the initial agreement between AES and the government of Puerto Rico, and applicable rules from the Environmental Protection Agency (EPA), AES began dumping coal-ash in Puerto Rico following settlement of its dispute in Dominican Republic.³⁰⁸ By 2004, coal-ash was being disposed of in at least 36 locations across Puerto Rico, including Peñuelas, Humacao, Santa Isabel, Salinas, Arroyo, Guayama.³⁰⁹ AES has dumped coal-ash by the side of the road, buried it in public land of high agricultural value, and dumped it near water sources (such as the Saco and Guamaní rivers).³¹⁰ In addition, the transportation from the AES power plant in Guayama to landfills in Peñuelas and Humacao meant that light coal-ash particles (fly-ash) were spread during its transportation throughout the routes.³¹¹

Spreading of coal-ash in Puerto Rico was facilitated by amendments to the Non-Hazardous Solid Waste Management Regulation, which now classify coal-ash not as a prohibited waste, but allowed for beneficial use as filler for construction materials.³¹² This was a significant departure from the original agreement between

302. *See id.* at 684.

303. *See id.*

304. *Id.* at 683-84.

305. Jef Feeley & Mark Chediak, *Power Company AES Settles Claim that It Killed or Deformed Babies with Dumped Coal Ash*, BLOOMBERG (Apr. 4, 2016), <https://www.bloomberg.com/news/articles/2016-04-04/aes-settles-suit-over-coal-ash-dumping-in-dominican-republic>.

306. *Pallano v. AES Corp.*, C.A. No. N09C-11-021, slip op. at 5 (Del. Super. Ct. July 15, 2011).

307. Feeley & Chediak, *supra* note 305.

308. *See AES Agreement*, *supra* note 2; Disposal of Coal Combustion Residuals from Electric Utilities, 75 Fed. Reg. 35,128 (proposed June 21, 2010) (to be codified at 40 C.F.R. pt. 257).

309. *See Alfonso*, *supra* note 289.

310. *Id.*

311. *Id.*; *see also Alvarado*, *supra* note 4.

312. The Non-Hazardous Solid Waste Management Regulation was amended on November 10, 1997 by the Environmental Quality Board. The EQB changed the definition of “solid waste” as to ex-

the Puerto Rican government and AES, and the EPA regulations prohibiting the disposal and use of coal-ash in Puerto Rico. As a result, AES created Agremax,³¹³ a product made from coal-ash that it deems safe for “secondary purposes,” such as construction, but in reality is extremely hazardous to human health and the natural environment.³¹⁴ Agremax has been used in Puerto Rico as a foundation for sidewalks, daily landfill cover, building blocks, gypsum board, and road base.³¹⁵ Exposure to Agremax poses a serious threat to human health, both during the construction phase and as a final product. The EPA and physicians have recognized that coal-ash may pose serious threats to health if leached into the ground, groundwater, or air.³¹⁶ Although several members of the Puerto Rican government have attempted to minimize the environmental hazards of coal-ash and Agremax, there has been overwhelming evidence of the toxic contamination of coal-ash and Agremax in Puerto Rico.³¹⁷

In December 2012, the EPA commissioned chemical tests and found that coal-ash can release high concentrations of heavy metals into the water and soil, such as arsenic and chromium, in addition to toxic compounds and carcinogens like molybdenum selenium and thallium, all of which are harmful to human health.³¹⁸ The levels of heavy metals found were thought to “exceed up to 9,000 times federal safety standards.”³¹⁹ Communities where coal-ash has been dumped or where Agremax has been used have felt the effects concretely. A report by DNA Environment LLC revealed that one million tons of coal-ash were dumped in Guayama, where the AES power plant is located, approximately 600,000 tons in Salinas, and approximately 200,000 tons in Arroyo.³²⁰ All of this coal-ash was ex-

clude coal-ash from its definition, thus permitting coal-ash to be used as filler for cement, asphalt, wall-boards and filling potholes. Junta de Calidad Ambiental, Reglamento Para el Manejo de Desperdicios Sólidos No Peligrosos de Puerto Rico (Puerto Rico Regulations for Handling of Non Hazardous Solid Waste), R.R. 641-42, 644 (Nov. 10, 1997).

313. In the United States, “Agremax” is known as “rock ash.” Alvarado, *supra* note 4.

314. *Id.*

315. *Id.*

316. *Id.*; see also *Coal Ash: Hazardous to Human Health*, PHYSICIANS FOR SOC. RESPONSIBILITY (July 28, 2010), <https://www.psr.org/wp-content/uploads/2018/05/coal-ash-hazardous-to-human-health.pdf>.

317. Alvarado, *supra* note 4; see also A.C. GARRABRANTS ET AL., EPA, EPA-600/R-12/724, LEACHING BEHAVIOR OF “AGREMAX” COLLECTED FROM A COAL-FIRED POWER PLANT IN PUERTO RICO 13 (Dec. 2012), <https://nepis.epa.gov/Adobe/PDF/P100G02B.pdf>.

318. GARRABRANTS ET AL., *supra* note 317; see also *Coal Ash: Hazardous to Human Health*, PHYSICIANS FOR SOC. RESPONSIBILITY (July 28, 2010), <https://www.psr.org/wp-content/uploads/2018/05/coal-ash-hazardous-to-human-health.pdf>.

319. See Alfonso, *supra* note 289.

320. DNA ENV'T, LLC, 2017 ANNUAL GROUNDWATER MONITORING REPORT AES PUERTO RICO LP, GUAYAMA, PUERTO RICO (Jan. 31, 2018), http://periodismoinvestigativo.com/wp-content/uploads/2018/03/2017_01_31_AES_Groundwater-Monitoring-and-Corrective-Action_Annual-Report.pdf.

posed to the elements, left by the side of the road, dispersed through the air, and along river banks going into important water sources.³²¹ These communities have felt the environmental hazards for decades.³²²

Additionally, environmental conditions became more complicated in Puerto Rico when Hurricane María devastated much of the island. When coal-ash mixes with water and soil, it increases the concentration of toxic elements.³²³ Given the already toxic levels of coal-ash in these communities, Hurricane María may exacerbate and prolong the already devastating effects.³²⁴ Many residents living close to the AES power plant or where Agremax is stored have observed that the surfaces inside their homes are covered in a layer of ash residue.³²⁵ One in ten residents of the affected communities in Guayama, near the AES power plant, has cancer.³²⁶ One in four of the residents of those same communities has a respiratory disease, and more than half have heart problems.³²⁷ The health crisis is so severe that a local doctor who has been treating many cancer patients in the area has called upon the Puerto Rican government to conduct a scientific study on higher incidence of cancer and the potential link to the exposure of coal-ash.³²⁸ Many others have called upon the government to take action and ban the operations by AES, the mismanagement of coal-ash, and the use of Agremax as a construction filler.³²⁹

I think about my grandchildren and I think about the suffering that these people have gone through. They need to do something. Investigate, check the environment. Because now it is our people but tomorrow it could be theirs because we are on the same island. It does not just affect Guayama, it affects all of Puerto Rico.³³⁰

The human rights of Puerto Ricans have been violated. Residents have been exposed to coal-ash, fly-ash, and Agremax. The government of Puerto Rico has acquiesced and facilitated the violation of human rights to a healthy environment,

321. See Yessenia Funes, *Puerto Rico had Towering Landfills and Coal Ash Pollution. Then Maria Hit*, GRIST (Sep. 29, 2017), <https://grist.org/article/puerto-rico-had-towering-landfills-and-coal-ash-pollution-then-maria-hit/>.

322. See Emily Atkin, *There's Coal Waste in Puerto Rico's Groundwater*, NEW REPUBLIC (Apr. 2018), <https://newrepublic.com/minutes/147545/theres-coal-waste-puerto-ricos-groundwater>.

323. Funes, *supra* note 321.

324. *Id.*

325. See Ivette Feliciano & Zachary Green, *Coal Ash Raising Concerns Over Health Risks in Puerto Rico*, PBS NEWS HOUR (Apr. 28, 2018), <https://www.pbs.org/newshour/show/coal-ash-raising-concerns-over-health-risks-in-puerto-rico>.

326. *Id.*

327. *Id.*

328. *Id.*

329. See Katie Rice, *A Fight for Life*, AFTERMATH, <https://aftermath.unc.edu/pages/pollution> (last visited Nov. 4, 2019).

330. Feliciano & Green, *supra* note 325 (statement by Natividad Perez Burgos).

health and reproductive health, life, adequate standard of living, food, clean and safe water, and the rights of the child.³³¹ They have also violated procedural human rights in the freedom of expression and association, and to information, participation, and effective remedies.

The right to a healthy environment has been violated because communities in Guayama, Peñuelas, Salinas, Humacao, Arroyo, Santa Isabel and other municipalities that have had coal-ash dumped on the ground have had their air contaminated with fly-ash particles.³³² Water sources have been contaminated by coal-ash that has been dumped on the ground and in riverbeds.³³³ The use of Agremax has caused toxic chemicals to leach into the ground and subterranean aquifers.³³⁴ Dust from coal-ash covers the homes of residents in the area, affecting the air they breathe and the toxic substances they come in contact with.³³⁵ The intrusion of this dust means that members of the affected communities cannot escape the contamination. When they go into their homes, a place of protection, they are exposed to dangerous contamination.³³⁶ This physical intrusion of coal-ash and toxic contamination of Agremax is a violation of the right to health, reproductive health, housing, family and standard of living, and the rights of the child.³³⁷

The cancer epidemic, the incredibly high incidence of respiratory problems, and skin lesions for adults exposed to coal-ash and Agremax represent a serious violation of the right to health and healthy environment. Furthermore, women of reproductive age have suffered high numbers of miscarriages due to their exposure to coal-ash.³³⁸ Children have been born with birth defects and severe developmental conditions, all of which are violations of reproductive rights and the rights of the child to health and healthy development.³³⁹ Further, children from lower income communities face higher concentrations of contamination and bigger obstacles to receiving medical attention due to information deficits.³⁴⁰

Exacerbating the violations of the rights to health, reproductive health and the rights of the child, the Puerto Rican government has denied the rights to information and participation. Parents and healthcare providers have been unable to

331. See Omar Alfonso, *Viven y Juegan Entre el Arsénico de las Cenizas de AES*, CENTRO DE PERIODISMO INVESTIGATIVO (Aug. 20, 2019), <http://periodismoinvestigativo.com/2019/08/viven-y-juegan-entre-el-arsenico-de-las-cenizas-de-aes/>.

332. *Id.*

333. *Id.*

334. *Id.*

335. *Id.*

336. *Id.*

337. *Dées v. Hungary*, App. No. 2345/06, Eur. Ct. H.R. ¶ 21 (2010).

338. See BARBARA GOTTLIEB ET AL., COAL ASH: THE TOXIC THREAT TO OUR HEALTH AND ENVIRONMENT at vii (2010), <https://www.psr.org/wp-content/uploads/2018/05/coal-ash.pdf>.

339. Clara G. Sears & Kristina M. Zierold, *Health of Children Living Near Coal Ash*, GLOB. PEDIATRIC HEALTH (July 25, 2017), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5533260/>.

340. GOTTLIEB ET AL., *supra* note 338, at 8.

receive accurate information about the environmental impacts of AES' operations and the effects of exposure to coal-ash.³⁴¹ The right to receive information requires that information be provided without delay and includes State-held information such as environmental impact assessments and any other information that may assist affected persons or communities to take protective measures in relation to their health and well-being.³⁴² Thus, the Puerto Rican government's unwillingness to provide such information represents a violation of the affected communities' participatory rights in decision-making and in providing their free, prior, and informed consent. The Puerto Rican government has at every point obstructed the flow of information and the ability of communities to truly consent to the egregious environmentally hazardous activities that affect them.³⁴³

Persons and communities affected by this information deficit are unable to protect themselves against present and future hazardous environmental conditions, which may be exacerbated by continuous and persistent environmental contamination in the air, ground and water. The Puerto Rican government has failed at every point to protect its people, especially children and women, from the toxic chemicals in coal-ash and Agremax. Poor, historically disenfranchised communities that have been historically discriminated against by the government and private entities are the most affected. Additionally, intersecting factors such as particular health risks to environmental contamination, age, gender, low income, and historic disenfranchisement render women and children at a higher risk from environmental harm.

As a result of these gross violations of environmental human rights, environmental human rights defenders have continued to fight the flagrant mismanagement of coal-ash in Puerto Rico.³⁴⁴ Interestingly, but not surprisingly, at the front lines of the movement against AES and coal-ash have been a great number of women activists and members of the communities affected.³⁴⁵ They have taken to the streets to stop trucks from moving through the routes, filed complaints against governmental agencies, and fought to gain visibility and to hold the Puerto Rican

341. See Danica Coto, *PR Activists Voice Concerns over Use of Coal Ash*, ASSOCIATED PRESS (Apr. 6, 2010), http://archive.boston.com/business/articles/2010/04/06/pr_activists_voice_concerns_over_use_of_coal_ash; see also *AES Dice Que las Cenizas no Son Contaminantes*, PRIMERA HORA (Apr. 21, 2019), <https://www.primerahora.com/noticias/gobierno-politica/nota/aesdicequelascenizasnosoncontaminantes-1338291/> (statements from AES denying that Agremax and coal-ash are toxic).

342. *Giacomelli v. Italy*, 45 Eur. Ct. H.R. 38, ¶ 83 (2006); Knox Report A/HRC/37/59 (Jan. 24, 2018), *supra* note 10, at Annex ¶¶ 17-19 (Framework Principle 7).

343. Cindy Burgos Alvarado, *Six Protestors Arrested in Puerto Rico Over Coal Ash Dumping by 70 Trucks*, CARIBBEAN BUS. (July 12, 2017), <https://caribbeanbusiness.com/six-protesters-arrested-in-puerto-rico-over-coal-ash-dumping-by-70-trucks/>.

344. *Opponents to Coal Ashes Claim the Deposit in Peñuelas Was Illegal*, VOCES DEL SUR (Jan. 21, 2018), <https://vocesdelsurpr.com/2018/01/opositores-cenizas-carbon-afirman-deposito-penuelas-fue-ilegal/>.

345. *Id.*

government accountable.³⁴⁶ The image of the activists who have been fighting this giant private corporation and the government is one of community members, especially women, who stand day by day to continue to oppose AES and to protect their families and communities (“la salud de nuestras familias”).³⁴⁷ While there are many men who have engaged in vigorous advocacy to end the dumping of coal-ash and the use of Agremax, women have taken leadership roles in high numbers to move this environmental campaign forward.

Local municipalities have also been mobilizing to prohibit the use of coal-ash and Agremax in spite of the Puerto Rican government’s support of Agremax as a “secondary” use of coal-ash.³⁴⁸ “In 2010, [activists] started a campaign to push forward the adoption of municipal ordinances prohibiting the use of coal-ash. Fifty two municipalities in Puerto Rico approved such ordinances.”³⁴⁹ Environmental human rights defenders have been filing complaints against AES and suing the government to obtain information about the harmful activities of AES in the southern municipalities.³⁵⁰ Community activists have mobilized around stopping trucks leaving AES facilities in Guayama to dump the coal-ash in landfills in Peñuelas and Humacao.³⁵¹ Environmental human rights defenders have lined the sides of the road day and night to obstruct the paths of trucks. However, AES trucks have been escorted by police patrols to ensure that AES continues operating without the obstruction of protesters.³⁵²

Puerto Rican courts laid the groundwork for preemption of municipal ordinances prohibiting the dumping of coal-ash in landfills, and federal and commonwealth courts have since struck down such local regulations as inconsistent with Commonwealth law,³⁵³ which has resulted in AES continuing to violate human

346. *Id.*

347. *Id.*

348. The Government of Puerto Rico, the Environmental Quality Board and Board of Planification have authorized permits for AES. *See* Ordenanza Municipal Peñuelas Num. 13, Serie 2012-2013.

349. E-mail from Victor Alvarado Guzmán, Spokesperson for Comité Ambiental de Salinas (Aug. 16, 2018) (on file with author).

350. Vázquez, *supra* note 1; Municipio Autónomo de Peñuelas v. Ecosystems, Inc. Certiorari, 1016 TSPR 247, Case No. CC-2015-325 (Dec. 19, 2016); AES Puerto Rico, L.P. v. Trujillo-Panisse, No. 16-2052 (1st Cir. 2017).

351. Some of the community organizations engaging in this environmental work include La Alianza Comunitaria Ambientalista del Sureste (ACASE). *See* Dominican Republic v. AES Corp., 466 F. Supp. 2d 680, 685 (E.D. Va. 2006).

352. *Impresionante Cantidad de Policías Escolta Camiones de AES*, LA PERLA DEL SUR (Aug. 9, 2017), <https://www.periodicolaperla.com/impresionante-cantidad-de-policias-escolta-camiones-de-aes-videogaleria/>.

353. *Autonomous Mun. of Peñuelas v. Ecosystems, Inc.*, No. CC-2015-0325 (P.R., Dec. 19, 2016) (upholding a local ban on coal ash disposal, but finding that the Commonwealth Environmental Quality Board (EQB) could have preempted such a ban had it issued a stricter permit); *AES Puerto Rico, L.P. v. Trujillo-Panisse*, 857 F.3d 101 (1st Cir. 2017) (using the reasoning of the Puerto Rico Supreme Court in *Ecosystems* to find that EQB had preempted a local ban on coal ash disposal). Puerto

rights. Activists “are indignant about the decision by the court in Boston. Not just from a legal standpoint, but also because this is supposed to be a decision by [H]umacaños, represented by the municipal legislature and its mayor.”³⁵⁴ There has been a stripping away of local decision-making and the right to consultation and participation. The affected communities have been left in the dark about the harms that they have been exposed to and the harms that their children and future generations will suffer from the extremely toxic contaminants in the area. Communities seeking environmental impact statements have faced serious obstacles from the Puerto Rican government. Affected communities and the public have been prevented from obtaining information and exercising their participatory rights in decision-making processes.

Members of these communities, environmental human rights defenders, and some politicians have faced harsh penalties for expressing their opposition to the contamination. The Puerto Rican police have arrested many environmental human rights defenders and activists for alleged violations of Puerto Rican transit and obstruction of justice law when engaging in nonviolent civil disobedience and expressing their opposition to the contamination.³⁵⁵ Defenders and community members have been subjected to arrests, indiscriminate use of force, degrading treatment, and the misuse of law to justify detentions.³⁵⁶ As part of their work, environmental human rights defenders have sought to exercise their procedural rights to seek, receive, and impart information, participate in decision-making processes, and oppose AES operations through civil disobedience and other peaceful means.³⁵⁷ The government has stopped environmental human rights defenders at every point in their work, violating their rights to engage in human rights work.

This exclusion from decision-making and obtaining information violates the right of the affected communities to provide their prior informed consent on projects that affect them. The right to information requires that the Puerto Rican government collect, update, and disseminate information relating to the quality of air and water, and to dangerous pollutants that may harm the public. Without provid-

Rican appellate courts have since ruled that local bans on Agremax disposal are preempted by Commonwealth law. *E.g.*, *Comité Pro Salud v. Junta de Calidad Ambiental*, No. PE-2017-0289 (Jan. 12, 2018). *See* Kat Sieniuc, *1st Circ. Says Puerto Rican Law Trumps Local Coal Ash Rules*, LAW360 (May 17, 2017), <https://www.law360.com/articles/924798/1st-circ-says-puerto-rican-law-trumps-local-coal-ash-rules>; *see also* Vázquez, *supra* note 1.

354. Cesiach López Maldonado, *Humacao Le Hará Frente a Las Cenizas*, PRIMERA HORA (June 2, 2017), <http://www.primerahora.com/horizonte/noticias/puerto-rico/nota/humacao-le-hara-frente-a-las-cenizas-1227855/> (translating statement from Timmy Boyle, spokesperson for Alianza Comunitaria Ambientalista del Sureste, speaking about the decision by the Court of Appeals, Boston Circuit, to invalidate municipal ordinances prohibiting the dumping of coal-ash in landfills).

355. *See* Reinaldo Millán, *Arrestan 20 Manifestantes Contra Cenizas en Peñuelas*, PRIMERA HORA (Nov. 21, 2016), <https://www.primerahora.com/noticias/puerto-rico/nota/arrestan20manifestantes-en-peñuelas-1189477/>.

356. *See id.*

357. *See id.*

ing the affected communities and the public with environmental impact assessments, prior informed consent and effective participation cannot occur.

Yanina Moreno, a community leader from the Tallaboa community and Camamento contra las Cenizas, discussed the discrimination that she and others in her community have faced. “We are poor and marginalized communities, and they think that because we are poor, we do not matter.”³⁵⁸ As Moreno indicated, members of these communities have suffered historical, systemic, and persistent discriminatory treatment by the Puerto Rican government. These communities have suffered discrimination and environmental racism by being targeted by the government and private companies to operate their businesses in these communities.

These communities are rural and marginalized with limited to no access to decision-making processes or accompanying legal remedies. They have not had access to environmental impact assessments, a meaningful ability to participate in decision-making, or access to effective remedies.³⁵⁹ These communities should have been consulted prior to the 25-year contract authorizing AES to produce coal-based energy, throughout AES’ operation of the power-plant, the mismanagement and disposal of coal-ash, and the approval and use of Agremax. The Puerto Rican government has failed to protect affected communities and their rights to equality and nondiscrimination. These communities must have their right to effective remedies protected, and as such must be provided restitution and guarantees of non-repetition as required under international human rights law.³⁶⁰ In this context, the Puerto Rican government and AES have the duty to remediate the contamination of sites and to cease storing or using Agremax or any other coal-related product, and to provide restitution to the community, ensuring that they and their children receive medical and psychological assistance to mitigate the damages already done and prevent harm to future generations.

The suffering of the affected communities in Guayama, Peñuelas, Humacao, Arroyo, Salinas, and Santa Isabel, among others, has been one based on environmental racism, discrimination, disenfranchisement, and abandonment. The Puerto Rican government has eagerly invited private corporations to establish power plants, pharmaceutical plants, mines, and other facilities creating environmental harm, with the Puerto Rican people paying the price. In the case of the Puerto Ri-

358. Ivelisse Rivera Quiñones, *Larga Lucha Ambiental en Peñuelas*, EL NUEVO DÍA (Nov. 27, 2016), <https://www.elnuevodia.com/noticias/locales/nota/largaluchaambientalenpenuelas-2266704/>.

359. See AES Agreement, *supra* note 2, ¶ 6.14 (“PREPA agrees that all information (whether financial, technical, or otherwise) obtained from Operator or from PREPA’s inspections of the Facility . . . which is not otherwise generally available to the public shall be kept confidential . . .”). Environmental impact studies are only mentioned once in the AES Agreement, which simply states that AES must conduct any necessary environmental assessments. *Id.* ¶ 4.1. The actual assessments appear to be among the “all information” covered as confidential under ¶ 6.14.

360. Knox Report A/HRC/34/49 (Jan. 19, 2017), *supra* note 11, ¶ 10; Rio Declaration, *supra* note 21, at Principle 10; see also *Mossville*, *supra* note 180, ¶ 42; *Dées v. Hungary*, App. No. 2345/06, Eur. Ct. H.R. ¶ 27 (2010); Aarhus Convention, *supra* note 217, at art. 9(4).

can coal-ash disaster, we can no longer ignore the connection between environmental harm, the efforts by the environmental justice movement, and human rights. Human rights serve as a rights-based framework for the affected communities in the southern region of Puerto Rico that have for decades suffered from egregious environmental contamination, and whose health, life, and environment have been affected. A human rights lens, through which the human right to a healthy environment and interrelated rights are protected, serves as a critical tool for affected communities, environmental human rights defenders, and the Puerto Rican people to protect their environment. Additionally, a human rights framework establishes that the Puerto Rican government has a special duty to hold private corporations responsible for violating human rights, especially those of vulnerable populations.

CONCLUSION

The Puerto Rican government and AES have been complicit in the violation of the human rights of the Puerto Rican people. Communities in the southern municipalities of Puerto Rico have been subjected to persistent pollution, discrimination, and abuse. Adults, women and children have suffered from serious illnesses due to the persistent exposure to coal-ash and Agremax. Their rights to health, reproductive health, and development have been affected by the exposure to these pollutants. Members of the affected communities have been unable to receive environmental impact assessments that provide them accurate information that would be helpful to prevent or mitigate health damages from the hazardous conditions in which they live. Additionally, environmental human rights defenders have been suppressed and prevented from obtaining information and navigating participatory processes to protect affected communities from AES' environmental harm. The Puerto Rican government has profited from long-term contracts without obtaining the free, prior, and informed consent of communities that have been affected, and continue to be affected, by the egregious environmental harm. Holding the Puerto Rican government and AES responsible for violations of human rights in Puerto Rico must be a priority. Puerto Ricans must be afforded the opportunity to exercise their right to a healthy environment. Full enjoyment of that right includes access to adequate remedies, including restitution, fair and equitable compensation for the harms committed, and guarantees of non-repetition.

A human rights legal framework provides Puerto Rican victims of environmental harm with a rights-based framework. The protection of the right to a healthy environment and interrelated rights provides robust protections for the affected communities, but also encourages better environmental policy, transparency and accountability. A human rights framework seeks to hold the government and AES responsible for violations of the right to a healthy environment. Human rights in the area of environmental policy include the collection and dissemination of environmental impact assessments to affected communities and the public, strengthening participatory rights of communities, free, prior, and informed con-

sent, and the protection of environmental human rights defenders. Additionally, a human rights framework requires the Puerto Rican government to consider and provide heightened protections for vulnerable communities and persons exposed to environmental harm. In Puerto Rico and elsewhere, viewing the right to a healthy environment through a human rights lens anchors the focus on the human experience and takes a holistic approach to the protection of vulnerable populations in relation to environmental harm.