

# Silent Spring + 55: The Human Right to a Clean Environment

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*Various environmental and human rights law regimes have developed over the last 55+ years since the publication of Silent Spring in 1962 to address the environmental and human rights law issues of our time. This paper critically examines such regimes and offers novel legal paths forward to help combat climate change and related human rights issues through advocacy for formal recognition of the human right to a clean environment. This paper tracks how the fundamental premise that human health and indeed survival are inextricably dependent upon a clean and sustainable environment has provided the foundation for many of the major environmental and human rights law agreements of our time. It further argues that the wide international acceptance of such premise and the ability to define it has firmly rooted the human right to a clean environment in international customary law. This paper also evaluates and offers alternatives to the failures of the current legal systems, economic paradigms, and prevailing mindsets that have each contributed to the current state of global environmental crisis. In so doing, this paper answers the following questions: What is the Right to a clean environment Why is it necessary? How will it make a difference in environmental protection and human rights?*

*More specifically, this paper argues that climate change and the status of the world's poor provide empirical evidence that the current environmental and human rights legal systems have been largely ineffective and have failed to provide us with solutions to the fundamental issues that had spawned their birth. Furthermore, this paper argues that such failures directly impact the ability of states to guarantee basic human rights to all citizens, especially the poorest and most marginalized among us, and to ensure a healthy, sustainable planet for future generations. World population growth forecasts for the next 100 years combined with the effects of climate change are looked to as evidence of another impending famine in Africa that will most certainly challenge the ability of states to meet the basic human rights of the poor.*

*This paper also offers a vision to reconcile the duality within the current environmental and human rights law regimes to create a unified approach to human rights and environmental protection. Moreover, and perhaps most importantly, it is argued that the human right to a clean environment already exists and is ready to be drawn upon by activists to counter decisions of the current administration, such as America's withdrawal from the Paris Agreement.*

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*In many respects this paper is the culmination of arguments and themes that I have cultivated over the course of my educational and professional careers, and truths that I have valued my entire life. I began writing this paper in 2017, having been motivated by the current climate change crisis and the current administration's announcement to pull the U.S. out of the Paris Agreement. 2017 marked 55 years after the publication of *Silent Spring*, a book that I have long held dear, and so that is how this paper came to be named. As you read this paper, I encourage you to consider that we all have the ability to change the world through our thoughts, words, and actions. This paper is my effort to do just that and to bring balance back into the world. In the end, the changes called for in this paper must be born from our love of the earth and humanity, not the desire to conquer or control. I wish to offer my gratitude to all the teachers who have come into my life from near and far to help make this work possible including everyone at Environs for giving me the opportunity to make my voice heard. It is my hope that *Silent Spring* +55 will do for the human rights movement what the original *Silent Spring* did for the environmental movement - spark change and ignite the everyday person to demand that which inherently belongs to him or her – a clean, sustainable environment.*

#### I. INTRODUCTION

“Who would want to live in a world which is just not quite fatal?”<sup>1</sup> More than half a century ago the visionary biologist Rachel Carson asked that question in response to man’s disharmony with the natural world, which had silenced the spring. Today we find ourselves at another precarious moment in time in the history of our planet and of man’s very existence not unlike the one Rachel Carson identified when she urged future generations to take the brave step forward onto “the road less traveled” to preserve and protect the earth.<sup>2</sup> Despite 55 years of advancements in international and domestic environmental and human rights laws, we are faced with a grossly polluted, warming planet—a planet that cannot support basic human rights for the poor and current consumption patterns, let alone those of an exponentially growing world population. World population growth coupled with the impending catastrophic effects of climate change substantially interfere with a state’s duty to protect, respect, and fulfill the human right to life, as well as the aspirational rights to water, food, and dignity of person. Thus, humankind has arrived at another proverbial fork-in-the-road due to our policy failures over the last 55+ years. This time, however, rather than call for more regulation, the next path forward must demand systemic change in the way in which we define environmental and human rights’ paradigms. The existing two regime approach must be combined

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<sup>1</sup> RACHEL L. CARSON, *SILENT SPRING* 12 (25th anniversary ed. 1987) (quoting Paul Shepard, *The Place of Nature in Man’s World*, 13 *Atlantic Naturalist* 85, 85-89 (1958)).

<sup>2</sup> *Id.* at 277.

into a single hybrid model that embraces the interdependence of the two systems and then merges them into the right to a clean environment (“the Right”) as a stand-alone, fundamental human right. Indeed, this has been quietly occurring over the last 55 years to deliver the Right at a time when humankind, the planet, and all its natural inhabitants need it most.

## II. WHAT IS THE RIGHT TO A CLEAN ENVIRONMENT?

### A. *The Right to a Clean Environment is Defined by a Mix of Hard and Soft Laws that Define it and Give Evidence of its Wide-Spread Acceptance and Obligatory Nature.*

If the Right can be said to exist today, it must be identifiable under existing precedent. In *Sosa v. Alvarez-Machain et al.*, the United States Supreme Court defined the test for whether a norm has achieved the status of international customary law<sup>3</sup> A norm, or “proposition”, the Court said, must be “specific, universal and obligatory” (the “Sosa Test”) to be identifiable under international law. Although the Sosa Test rose out of a different set of circumstances, application of it here to the Right is a useful marker by which to examine whether the Right can withstand legal muster.<sup>4</sup>

Analysis of a sampling of historical international environmental and human rights agreements, regional charters, state constitutions, and the expressed sentiments of international bodies, as well as those of world leaders show that the Right has slowly and quietly grown in strength over the last half-decade since the publication of *Silent Spring* and arguably now meets the Sosa Test.<sup>5</sup> Although the analysis is somewhat cumbersome, review of a sampling of historical international environmental and human rights agreements, regional charters, state constitutions, and the expressed sentiments of international bodies, as well as those of world leaders shows that the Right is specific, has widespread acceptance, and is obligatory.

### B. *The 1940s: Human Rights are Universal; State Sovereignty has its Limits.*

The analysis begins with the 1942 Foundational Charter of the United Nations, which affirms the Member States’ intentions to uphold a moral code that would come to set the basis for the international human rights regime.<sup>6</sup> For example, the U.N. Foundational Charter states:

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<sup>3</sup> *Sosa v. Alvarez-Machain et al.*, 542 U.S. 692, 748 (2004).

<sup>4</sup> *Id.*

<sup>5</sup> Note that this paper does not argue for reviewability of the Right in U.S. federal courts under the Alien Tort Statute or any other law, but refers to the *Sosa* test as an objective parameter by which to gauge whether the Right has achieved the status of international customary law.

<sup>6</sup> OLIVIER DE SCHUTTER, *INTERNATIONAL HUMAN RIGHTS LAW* (2d ed. 2014).

We the Peoples of the United Nations determined . . . to reaffirm faith in fundamental human rights, in the dignity and worth of the human person, in the equal rights of men and women and of nations large and small . . .<sup>7</sup>

Six years later, the General Assembly established the Universal Declaration of Human Rights (“UDHR”), which established for the first-time certain fundamental human rights to be universally protected.<sup>8</sup> Of particular import in regard to the right to a clean environment is: Article 1 (the right to life, liberty and security of person), Article 7 (equal protection under the law), Article 22 (the right to economic, social and cultural rights), and Article 25 (the right to a standard of living adequate for health and well-being including food, clothing, housing and medical care and necessary social services).<sup>9</sup> Set between these two landmark actions were the Nuremburg trials; the outward showing by Europe and America that the international community would not remain silent to human rights abuses carried out within the purported sovereignty of a nation, nor allow those who breached then-undefined international norms to escape prosecution.<sup>10</sup> The reaction of the international community was a bold step forward in response to the atrocities of World War II to pierce state sovereignty and hold a state, as well as individual actors, accountable for human rights abuses.

On the environmental front, the Trail Smelter case, an international arbitration matter between the United States and Canada, was decided in successive decisions in 1938 and 1941. This landmark decision imposed damages and injunctive relief upon Canada and Canadian private interests as a result of cross-border sulphur dioxide (SO<sub>2</sub>) emissions (a secondary greenhouse gas) that caused damage to land, livestock, and property within the State of Washington.<sup>11</sup> The Trail Smelter decisions indirectly support the Right through valuable precedent in both domestic and international law. This precedent may be summarized as: (1) holding states accountable in basic tort for damage to property, or persons, in another state caused by the release of a greenhouse gas by the state or private corporations within the state’s territory, and (2) finding liability in the face of highly contested technical and scientific data open to more than one interpretation.<sup>12</sup> The connection between the Right and the Trail Smelter decisions will be explained further in subsequent sections herein.

### C. *The 1960s: Water Knows No Frontiers.*

With the passage of the European Water Charter (“EWC”) in 1968 by the

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<sup>7</sup> U.N. Charter Preamble.

<sup>8</sup> G.A. Res. 217 (III) A, Universal Declaration of Human Rights (Dec. 10, 1948).

<sup>9</sup> *Id.*

<sup>10</sup> DE SCHUTTER, *supra* note 6.

<sup>11</sup> TRAIL SMELTER CASE (U.S., CANADA), REPORTS OF INTERNATIONAL ARBITRAL AWARDS 1905 (U.N. 2006) [hereinafter Trail Smelter Case].

<sup>12</sup> *Id.*

European Council, the inextricable links between the right to life, the environment, and water was officially recognized. The EWC stated in pertinent part:

There is no life without water. It is a treasure indispensable to all human activity . . . To pollute water is to harm man and other living creatures which are dependent on water . . . [A]ll life on earth in its infinite variety depends upon the manifold qualities of water . . . Water knows no frontiers.<sup>13</sup>

In the same year, the UN Economic and Social Council recommended the General Assembly consider convening a UN conference on the human environment.<sup>14</sup> In doing so, the council stated its concern for “the consequent effects” of the “continuing and accelerating impairment of the human environment . . . on the condition of man, his physical and mental well-being, his dignity and his enjoyment of basic human rights in developing as well as developed countries.”<sup>15</sup> The concerns emphasized by EWC and the UN Economic and Social Council are consistent with those addressed in the UDHR with respect to the connectivity between life and the environment.

*D. The 1970s: The Natural Environment is Essential to Man's Survival.*

The world subsequently came together in 1972 in Stockholm, Sweden for the groundbreaking UN Conference on the Human Environment.<sup>16</sup> Stockholm produced two major outtakes that changed the course of international environmental law: The Report on the UN Conference on the Human Environment (the “Stockholm Report”) and the creation of the United Nations Environment Programme (UNEP).<sup>17</sup> The Stockholm Report made several significant leaps forward in the scope of environmental protection.<sup>18</sup> Moreover, in the context of human rights, it set key building blocks for the rise of the Right as a universally recognized human right, to wit:

[M]an's environment, the natural and the man-made, [is] essential to his well-being and to the enjoyment of basic human rights—even the right to life itself. . . . The protection and improvement of the human environment is a major issue which affects the well-being of peoples and economic development throughout the world; it is the urgent desire of the peoples of the whole world and the duty of all Governments. . . . We see around us growing evidence of man-made harm in many regions of the earth:

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<sup>13</sup> EUR. CONSULT. ASS., *Eur. Water Charter* 60-61 (proclaimed May 6, 1968).

<sup>14</sup> Economic and Social Council Res. 1346 (XLV) (July 30, 1968).

<sup>15</sup> *Id.*

<sup>16</sup> See, U.N. Conference on the Human Environment, *Report of the U.N. Conference on the Human Environment*, U.N. Doc. A/CONF.48/14/Rev.1 (June 5-16, 1972).

<sup>17</sup> *Id.*

<sup>18</sup> *Id.*

dangerous levels of pollution in water, air, earth and living beings; major and undesirable disturbances to the ecological balance of the biosphere; destruction and depletion of irreplaceable resources; and gross deficiencies, harmful to the physical, mental and social health of man . . .<sup>19</sup>

Through this proclamation, the ground work for the right to a clean environment as a human right had been established.

Four years later, two multilateral human rights treaties paramount to the establishment of several additional human rights that directly relate to and are intrinsically a part of the Right entered into force. The International Covenant on Economic, Social, and Cultural Rights (“ICESC”) and the International Covenant on Civic and Political Rights (“ICCPR”) entered into force in 1976.<sup>20</sup> Together with the UDHR, these treaties combined to form what is known as the International Bill of Rights.<sup>21</sup> The high ratification and signatory rates of the ICESC and ICCPR show wide acceptance by the global community of the rights set forth within each respective treaty.<sup>22</sup>

The ICESC is significant because it solidified in treaty form “the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing, and housing, and the continuous improvement of living conditions” and “the right of everyone to be free from hunger.”<sup>23</sup> Furthermore, in Article 2(1), the signatories to the ICESC promised to use good faith efforts, including enacting legislation, to ensure the “progressive realization” of the ICESC rights.<sup>24</sup> The ICCPR is significant because it reiterates the fundamental importance of the duty to uphold the right to life, stating in Article 6, “Every human has the inherent right to life. This right shall be protected by law. No one shall be arbitrarily deprived of his life.”<sup>25</sup> Further, the ICCPR recognized the right to life as an absolute right not subject to derogation.<sup>26</sup> An important parallel between the two treaties is that they both recognized that the rights

<sup>19</sup> *Id.* at 6.

<sup>20</sup> Internat’l Covenant on Economic, Social, and Cultural Rights, Dec. 16, 1966, 993 U.N.T.S. 3; Internat’l Covenant on Civil and Political Rights, Dec. 19, 1966, 999 U.N.T.S. 171.

<sup>21</sup> The International Bill of Rights, ST/HR/1/Rev.6 (Vol. I, Part 1), accessed at: <http://www.ohchr.org/Documents/Publications/Compilation1.1en.pdf>.

<sup>22</sup> The ICESC has been ratified by 169 parties and signed by an additional 71 states and the ICCPR has been ratified by 172 parties and signed by an additional 74 states. Status of Treaties Chapter IV § 3: Internat’l Covenant on Economic, Social, and Cultural Rights, U.N. TREATY COLLECTION, [https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg\\_no=IV-3&chapter=4&clang=\\_en](https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=IV-3&chapter=4&clang=_en) (last updated June 11, 2018); Status of Treaties Chapter IV § 4: Internat’l Covenant on Civil and Political Rights, U.N. TREATY COLLECTION, [https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg\\_no=IV-4&chapter=4&clang=\\_en](https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=IV-4&chapter=4&clang=_en) (last updated June 11, 2018).

<sup>23</sup> Internat’l Covenant on Economic, Social, and Cultural Rights, *supra* note 20, at art. 11(1)-(2).

<sup>24</sup> *Id.* at art. 2(1).

<sup>25</sup> Internat’l Covenant on Civil and Political Rights, *supra* note 20, at art. 6.

<sup>26</sup> *Id.* at art. 4(2).

guaranteed under each covenant, respectively, “derive from the inherent dignity of the human person” and that “the individual” has “duties to other individuals and to the community to which he belongs.”<sup>27</sup>

By the close of the 1970s, the global community had come to formally recognize and accept that human life and dignity depend upon and are subject to man’s connectivity with the natural world and with each other. Without going so far as to identify the Right by name, through its words and actions the international community had begun to define the Right and weave it into the obligations and aspirations of international agreements.

E. *The 1980s: Sustainable Development Links Environment and the Poor.*

Moving into the next decade, various anthropogenic global events forced nations to address the impacts that the increasingly complex and dangerous activities of the modern world have on future generations, including poor and marginalized populations. The policies of the 1980s were affected by several significant global incidents that evinced the clear connection between anthropogenic environmental and humanitarian disasters, such as the Bhopal, India pesticide disaster which killed thousands of innocent people; the Chernobyl nuclear explosion which sent nuclear fall-out across Europe, increased cancer rates, and contributed to the fall of the Soviet Union; and the Exxon Valdez oil spill which dumped 11 million gallons of oil into Prince Edward Sound, Alaska, horrifying a nation and polluting a pristine natural environment into perpetuity.<sup>28</sup> At the same time, drought, civil war, and conflict-induced famine ravaged countries in Africa, killing millions and driving hundreds of thousands into migration in search of basic human rights protections.<sup>29</sup> By 1987, the World Commission on Environment and Development (“WCED”) was called upon by the United Nations General Assembly (“UNGA”) to produce a “global agenda for change.”<sup>30</sup> The outcome document of WCED, “the Brundtland Report” or “Our Common Future,” established the first universally accepted definition of “sustainable

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<sup>27</sup> *Id.* at preamble; Internat’l Covenant on Economic, Social, and Cultural Rights. *supra* note 20, at preamble.

<sup>28</sup> Stuart Diamond, *The Bhopal Disaster: How it Happened*, N.Y. TIMES (Jan. 28, 1985), <https://www.nytimes.com/1985/01/28/world/the-bhopal-disaster-how-it-happened.html>; *Backgrounder on Chernobyl Nuclear Power Plant Accident*, U.S. NUCLEAR REG. COMM’N, <https://www.nrc.gov/reading-rm/doc-collections/fact-sheets/chernobyl-bg.html> (last updated Aug. 15, 2018); Megan Gannon, *Exxon Valdez 25th Anniversary: 5 Facts About the Historic Spill*, LIVE SCIENCE (Mar. 24, 2014), <http://www.livescience.com/44314-exxon-valdez-spill-anniversary-facts.html>.

<sup>29</sup> Gayle Smith, *Ethiopia and the Politics of Famine Relief*, 145 MIDDLE EAST REP. (1987), <https://www.merip.org/mer/mer145/ethiopia-politics-famine-relief/>; Laura Hammond, *Ethiopians Who Survived the Famine: A Repatriation Success Story*, MIGRATION POL’Y INST. (Jul. 1, 2005), <http://www.migrationpolicy.org/article/ethiopians-who-survived-famine-repatriation-success-story>.

<sup>30</sup> Gro Harlem Brundtland, *Foreword to Our Common Future*, Report of the World Comm’n on Env’t & Dev., U.N. Doc. A/42/427. annex (Mar. 20 1987).

development,” signifying an expansion in scope of the international environmental law paradigm to one of environmental protection inclusive of economic considerations to enable “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”<sup>31</sup>

By the end of the decade, perhaps in part due to the global outcry for the victims (both human and natural) of the then recent catastrophic environmental and human rights events, global attention further shifted to the rights of the poor, where much focus has remained ever since. In 1989 the global conscious turned to the nexus between the need for a clean, sustainable environment and poverty, with the UNGA “[s]tressing that poverty and environmental degradation are closely interrelated and that environmental protection in developing countries must, in this context, be viewed as an integral part of the development process and cannot be considered in isolation from it and that it is crucial for states to “play their due role in preserving and protecting the global and regional environment in accordance with their capacities and specific responsibilities.”<sup>32</sup> The UNGA’s statements, made nearly 30 years ago, evidence the understanding that environmental protection and human rights go hand-in-hand, and that developing countries are the most vulnerable to systemic failures in the existing regimes and mindsets that determine environmental and human rights priorities. The UNGA’s call to action spawned the precedent setting UN Conference on Environment and Development (“UNCED”), held in Rio, Brazil, whose significance in defining the specificity, universality, and obligatory nature of the Right cannot be understated.

F. *The 1990s: A Call for Transformation of Attitudes and Behaviors; The Earth Summit.*

Considering all the progress and events that had come before it, the international stage was set for a bold leap forward in the 1990s. By the close of the decade, looking back upon the advancements reached during that time, it is clear that the Right had met the Sosa Test.

The monumental 1992 UN Conference on Environment and Development, also known as the Earth Summit, was unprecedented in terms of its wide participation by states, scope of issues identified and addressed, and commitments undertaken.<sup>33</sup> It continues to influence environmental, human rights, social, and economic policies today.<sup>34</sup> The Earth Summit was attended

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<sup>31</sup> *Id.*

<sup>32</sup> G.A. Res. 44/228, U.N. Conference on Environment and Development (Dec. 22, 1989).

<sup>33</sup> *The Earth Summit*, U.N. BRIEFING PAPERS/THE WORLD CONFERENCES: DEVELOPING PRIORITIES FOR THE 21ST CENTURY (May 23, 1997), <http://www.un.org/geninfo/bp/enviro.html>; *see also*, U.N. Conference on Environment and Development, *Rep. of the U.N. Conference on Environment and Development*, U.N. Doc. A/CONF.151/26 (Vol. IV) (Sept. 28, 1992).

<sup>34</sup> *The Earth Summit*, *supra* note 32.



by 172 governments, 108 of which were represented by heads of state or government representatives and 2,400 representatives of non-governmental organizations (“NGOs”). 17,000 other people attended the parallel NGO forum and approximately 10,000 on-site journalists broadcast the news of the conference to millions around the world.<sup>35</sup> According to the UN, the Summit’s message called for nothing less than “a transformation of our attitudes and behaviors” to bring about the necessary changes needed to address the “complexity of the problems facing us.”<sup>36</sup> Given the breadth of attendance and subject matter addressed, the Earth Summit platform and its call to action was overwhelmingly embraced by the global community.<sup>37</sup>

In stark contrast to the politicization of climate change science in the United States today and regarded by many on the right that the U.S. should retract from or ignore the international environmental and human rights commitments it has made, Republican President George H.W. Bush personally attended the Earth Summit and used his position and power to call the global community together in support of environmental protection on a global scale to combat climate change. On June 12, 1992, President Bush addressed the UNCED and proclaimed, *inter alia*:

The Chinese have a proverb: If a man cheats the Earth, the Earth will cheat man. The idea of sustaining the planet so that it may sustain us is as old as life itself. We must leave this Earth in better condition than we found it. Today this old truth must be applied to new threats facing the resources which sustain us all, the atmosphere and the ocean, the stratosphere and the biosphere. Our village is truly global. . . We come to Rio with an action plan on climate change. It stresses energy efficiency, cleaner air, reforestation, new technology. I am happy to report that I have just signed the Framework Convention on Climate Change.<sup>38</sup>

The words of George H.W. Bush are as equally profound and needed today as they were 26 years ago, and serve to support the argument in favor of establishment of the Right.

The Earth Summit also stands out in the evolution of the Right because of the ground-breaking policies and sentiments expressed in its unusually numerous outcome documents (three binding conventions and two soft-law policy documents). The outcome documents themselves contribute to the establishment of the Right in international law and U.S. domestic law and consist of: the UN framework Convention on Climate Change (“UNFCCC”), the UN Convention on Biodiversity (“UNCBD”), the UN Convention to Combat Desertification

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<sup>35</sup> *Id.*

<sup>36</sup> *Id.*

<sup>37</sup> *Id.*

<sup>38</sup> Address to the United Nations Conference on Environment and Development in Rio de Janeiro, Brazil, 1 PUB. PAPERS 924 (June 12, 1992).

(“UNCCD”), the Rio Declaration on Environment and Development (the “Rio Declaration”), and Agenda 21.

The UNFCCC, for example, took a bold leap of faith forward to memorialize in an agreement the fact that the world is facing a global climate change problem that threatens our very existence.<sup>39</sup> The UNFCCC set lofty, politically and economically difficult, yet needed goals to chart a sustainable path forward.<sup>40</sup> The goal of the UNFCCC is the prevention of “dangerous” human interference with the climate system through stabilization of greenhouse gas concentrations at sustainable levels and in sufficient time frames to ensure access to basic human rights while enabling sustainable economic development.<sup>41</sup> In furtherance of these goals, the UNFCCC requires states to take the precautionary step of acting in the interest of human safety even where scientific uncertainty exists.<sup>42</sup> Additionally, the UNFCCC places a greater responsibility on developed nations to chart the path toward climate sustainability.<sup>43</sup>

The UNFCCC entered into force on March 21, 1994 and advanced to near-universal membership with 197 ratifications, including the United States.<sup>44</sup> The UNFCCC was signed by President George H.W. Bush and ratified by Congress, having achieved the Constitutionally-required super-majority vote of two-thirds of the Senate, making it “the supreme law of the land” or of the same force and effect as federal law under the Supremacy Clause of the U.S. Constitution.<sup>45</sup> Thus, as a Congressionally ratified treaty, it is unlikely that the UNFCCC can be undone by a Presidential decision or executive order. Rather, removing the U.S. from the UNFCCC would require an act of Congress, likely the same super-majority vote of the Senate, which affirmed ratification in the first instance. In terms of U.S. law and precedent, these facts – the ratification by Congress of the UNFCCC and the resultant commitments to engage in efforts to reduce global warming and ensure human rights protections for all peoples – are foundational to the existence of the Right under U.S. and international customary law.

Another important outcome document to the Rio Earth Summit, the UNCBD, advances the argument that the Right represents the union of environmental and human rights law regimes. The UNCBD reflects the widespread acceptance of the notion that the prosperity experienced by humankind is dependent upon the

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<sup>39</sup> United Nations Framework Convention on Climate Change, May 9, 1992, 1771 U.N.T.S. 107.

<sup>40</sup> *See id.*

<sup>41</sup> *Id.* at art. 2.

<sup>42</sup> *Id.* at art. 3.3.

<sup>43</sup> *Id.* at forward.

<sup>44</sup> *Status of Ratification of the Convention*, UNITED NATIONS CLIMATE CHANGE, <https://unfccc.int/process/the-convention/what-is-the-convention/status-of-ratification-of-the-convention> (last visited Nov. 10, 2018).

<sup>45</sup> *Text – Resolution of Ratification: Senate Consideration of Treaty Doc. 102-38*, CONGRESS.GOV, <https://www.congress.gov/treaty-document/102nd-congress/38/resolution-text> (last visited Nov. 10, 2018); *see also* U.S. CONST. art. VI, cl. 2.

creative natural forces of the earth.<sup>46</sup> When the generative powers of the earth are taxed beyond their carrying capacity, humankind's prosperity necessarily retracts with them. Further, the UNCBD embraces the connectivity between the economic and social prosperity of humankind and the treasures of the natural world, recognizing that depletion of biodiversity will so too deplete the well from which our prosperity draws.<sup>47</sup> The foreword of the UNCBD eloquently provides further support that the Right is well entrenched in international customary law, adding to the specificity, universality, and obligatory nature of the Right, to wit:

The natural environment provides the basic conditions upon which humanity could not survive . . . ecosystems purify the air and the water that are the basis of life. They stabilize and moderate the Earth's climate . . . if any part of the web suffers break downs, the future of life on the planet will be at risk . . . In the 21<sup>st</sup> century, we will stand or fall on our ability to collectively eradicate poverty, guarantee human rights and ensure an environmentally sustainable future . . . Freedom from want, freedom from fear and sustaining our future are all part of the same equation . . . Every gene, species and ecosystem lost erodes the planet's ability to cope with change. For the poorest in the world this flexibility is a matter of life and death. For all of humankind it diminishes the quality of life.<sup>48</sup>

Like the UNFCCC, the UNCBD was widely accepted, with 196 ratifications world-wide.<sup>49</sup> The nearly unanimous ratification of the UNCBD combined with its emphasis on preservation of the natural world as a tool to ensure prosperity serves as additional evidence that the Right is recognizable under international law.

Another widely-ratified outcome document, the UNCCD, is the cardinal legally binding international agreement linking environment and development to sustainable land management.<sup>50</sup> The UNCCD also uniquely addresses conditions in Africa and other drylands areas where some of the most vulnerable ecosystems and peoples can be found.<sup>51</sup> The importance of the UNCCD's focus on Africa will be further explained herein. According to the UN, as the dynamics of land, climate and biodiversity are intimately connected, the

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<sup>46</sup> Convention on Biological Diversity preamble, May 6, 1992, 1760 U.N.T.S. 143.

<sup>47</sup> *History of the Convention*, CONVENTION ON BIOLOGICAL DIVERSITY, <https://www.cbd.int/history> (last visited Oct. 7, 2018).

<sup>48</sup> SECRETARIAT OF THE CONVENTION ON BIODIVERSITY, U.N. ENV'T PROGRAMME, SUSTAINING LIFE ON EARTH: HOW THE CONVENTION ON BIODIVERSITY PROMOTES NATURE AND HUMAN WELL-BEING (2000).

<sup>49</sup> Status of Treaties Chapter XXVII § 8: Convention on Biological Diversity, U.N. TREATY COLLECTION, [https://treaties.un.org/pages/ViewDetails.aspx?src=IND&mtmsg\\_no=XXVII-8&chapter=27&clang=\\_en](https://treaties.un.org/pages/ViewDetails.aspx?src=IND&mtmsg_no=XXVII-8&chapter=27&clang=_en) (last updated June 11, 2018).

<sup>50</sup> *About the Convention*, U.N. CONVENTION TO COMBAT DESERTIFICATION, <https://www.unccd.int/convention/about-convention> (last visited Oct. 2, 2018).

<sup>51</sup> *Id.*

UNCCD collaborates closely with the UNCBD and the UNFCCC to meet these complex challenges with an integrated approach and the best possible use of natural resources.<sup>52</sup> Similar to the UNFCCC and the UNCBD, the UNCCD also enjoyed widespread acceptance, with 196 ratifications.<sup>53</sup>

Examining now the soft-law policy documents, the Rio Declaration and Agenda 21 put forth a wealth of policy proclamations and aspirations designed to foster greater cooperation and singularity of purpose between nations to address climate change, poverty, sustainable development, and human rights.<sup>54</sup> The Rio Declaration called for the formation of new global partnerships to ensure the “integrity of the global environmental and developmental system” and recognized the “integral and interdependent nature of the earth.”<sup>55</sup> It put forth 27 non-binding principles intended to guide the international community toward greater unity and breadth of engagement.<sup>56</sup> Several of its principles stand out in support of the Right as a hybrid environmental and human right. For example, Principle 1 holds that “[h]uman beings are at the centre of concerns for sustainable development” and that people are “entitled to a healthy and productive life in harmony with nature;” Principle 3 holds that “The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations;” and Principle 5 holds that “All States and all people shall cooperate in the essential task of eradicating poverty as an indispensable requirement for sustainable development, in order to decrease the disparities in standards of living and better meet the needs of the majority of the people of the world.”<sup>57</sup>

Agenda 21 boldly sets out a comprehensive blueprint to lead us into the next century aimed at the “integration of environment and development concerns [so that] . . . greater attention to them will lead to the fulfillment of basic needs, improved living standards for all, better protected and managed ecosystems and a safer, more prosperous future.”<sup>58</sup> Agenda 21 identified specific areas of concern, such as cultivating greater cooperation and acceleration of sustainable

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<sup>52</sup> *Id.*

<sup>53</sup> Status of Treaties Chapter XXVII § 10: United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, U.N. TREATY COLLECTION, [https://treaties.un.org/pages/ViewDetails.aspx?src=IND&mtdsg\\_no=XXVII-8&chapter=27&clang=\\_en](https://treaties.un.org/pages/ViewDetails.aspx?src=IND&mtdsg_no=XXVII-8&chapter=27&clang=_en) (last updated June 11, 2018).

<sup>54</sup> U.N. Conference on Environment and Development, *Rio Declaration on Environment and Development*, U.N. Doc. A/CONF.15/26 (Vol. I), annex I (Aug. 12, 1992); U.N. Conference on Environment and Development, *Report of the United Nations Conference on Environment and Development*, ¶ 1.1, U.N. Doc. A/CONF.151/26 (Vol. I) (Aug. 12, 1992) [hereinafter *Agenda 21*]; see also FELIX DODDS, KIRSTY SCHNEEBERGER & FAROOQ ULLAH, STAKEHOLDER FORUM FOR THE FUTURE, REVIEW OF IMPLEMENTATION OF AGENDA 21 AND THE RIO PRINCIPLES (2012).

<sup>55</sup> *Rio Declaration on Environment and Development*, *supra* note 54.

<sup>56</sup> *Id.*

<sup>57</sup> *Id.*; see also U.N. Secretary-General, *Rio Declaration on Environment and Development: Application and Implementation*, ¶ 35, U.N. Doc. E/CN.17/1997/8 (Feb. 10, 1997).

<sup>58</sup> *Agenda 21*, *supra* note 54.

development in developing countries, combating poverty, changing consumption patterns, promoting and protecting human health, greater integration of environment into decision making, wiser land, ecosystem, water management, and empowerment and participation of women. The Agenda 21 parties also wisely recognized that “[n]o nation can achieve this on its own; but together we can - in a global partnership for sustainable development.”<sup>59</sup> Like the Rio Conventions, the policy documents also enjoyed pervasive acceptance: Agenda 21 was agreed to by consensus by all nations in attendance and the Rio Declaration was signed by over 120 countries.<sup>60</sup>

In sum, the participants of the Earth Summit recognized and agreed that the dynamics of land, climate, and biodiversity are intimately connected to man’s existence, dignity, and that the preservation of the earth for future generations depends on how we define our relationship with the earth. The Rio participants also recognized that the continuance of life and the possibility of equality for future generations will be compromised or lost without a radical transformation of the current economic, environmental, and social frameworks that define our world. The Earth Summit and its outcome documents give hard, credible evidence that the Right can pass the muster of the Sosa Test. One need only look to the Rio outcome documents and statements made by world institutions and leaders in support of the UNCED for clear evidence that the Right can be defined with specificity, has obtained universal acceptance, and is obligatory. Thus, the right to a clean, healthy, sustainable environment that is freely supportive of the right to life, clean air, clean water, adequate food, and dignity of person for present and future generations exists.

#### G. 21<sup>st</sup> Century Agreements and Sentiments Further Solidify the Right.

For the sake of brevity and relying on the proofs already provided in support of the Right, this paper’s analysis of historical international agreements ends here. However, such cessation should in no way be considered the full extent of the documents that could be examined. Additional review of the UN Conference on Sustainable Development or “Rio+ 20” and the advancements made by the yearly conference of parties, including the Paris Agreement provide further proof that the Right exists and is ready to be drawn upon by activists. Like the agreements that came before it, the Paris Agreement enjoyed near universal acceptance and was signed by a U.S. President, Barak Obama.<sup>61</sup> It was adopted

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<sup>59</sup> *Id.*

<sup>60</sup> Edward A. Parson, Peter M. Haas & Marc A. Levy, *A Summary of the Major Documents Signed at the Earth Summit and the Global Forum*, 34 *Env’t. Sci. and Pol’y for Sustainable Dev.* 12, 12-36 (2010).

<sup>61</sup> See Status of Treaties Chapter XXVII § 7.d: Paris Agreement, U.N. TREATY COLLECTION, [https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtmsg\\_no=XXVII-7-d&chapter=27&clang=\\_en](https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtmsg_no=XXVII-7-d&chapter=27&clang=_en) (reporting that 195 nations ratified the Paris Agreement) (last updated June 11, 2018); Lisa Friedman, *Syria Joins Paris Climate Accord, Leaving Only US Opposed*, N.Y. Times (Nov. 7,

by 195 nations at the 21<sup>st</sup> Conference of the Parties to the UNFCCC. The goal of the Paris Agreement is to hold increases of global average temperature to well below 2 degrees Celsius above pre-industrial levels.

Likewise, analysis of various other foundational agreements and state constitutions would reveal how the right to a clean sustainable environment has already been incorporated into regional and domestic legislation.<sup>62</sup> For example, the Protocol of San Salvador has held that all people have the right to live in a healthy environment and to have access to basic public services.<sup>63</sup> The African Charter on Human and Peoples Rights provides that all people are entitled to a sustainable environment.<sup>64</sup> Within the United States, the state Constitution of Hawaii is perhaps the most explicit in that it provides that not only does every person have the right to a clean and healthy environment, but that every person has the power to enforce the right against any party, public or private.<sup>65</sup>

Lastly, the statements of world leaders are also accepted sources of authority as to whether a norm has reached acceptance as international customary law. This paper examines the statements by 2 of the most prominent spiritual leaders of our time in an effort to show that identification and acceptance of the Right permeates not only the highest levels of multilateral international agreements, but also the realm of the common man. Pope Francis, for example, is the leader of the Catholic church and spiritual leader to 1.3 billion people.<sup>66</sup> Pope Francis authored his first encyclical, the *Laudato Si* to advocate for climate change reform and to open an inclusive dialogue on how we as a global society regard nature and the environment.<sup>67</sup> In many ways, the Pope's words mirror the sentiments and provisions of the many international agreements previously examined in this paper with respect to the causal connection between the

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2017), <https://www.nytimes.com/2017/11/07/climate/syria-joins-paris-agreement.html>.

<sup>62</sup> See, e.g., 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. 19, 1999, 69 O.A.S.T.S. ("Everyone shall have the right to live in a healthy environment and to have access to basic public services . . . The States Parties shall promote the protection, preservation, and improvement of the environment."); African Charter on Human and Peoples Rights art. 24, Oct. 21, 1986, 21 I.L.M. 58 (1982) ("All peoples shall have the right to a general satisfactory environment favorable to their development."); HAW. CONST. art. XI, §9 ("Each person has the right to a clean and healthful environment, as defined by laws relating to environmental quality, including control of pollution and conservation, protection and enhancement of natural resources. Any person may enforce this right against any party, public or private, through appropriate legal proceedings, subject to reasonable limitations and regulation as provided by law.")

<sup>63</sup> *Id.*

<sup>64</sup> African Charter on Human and Peoples Rights, *supra* note 62, at art. 24.

<sup>65</sup> HAW. CONST. art. XI, §9.

<sup>66</sup> #6 Pope Francis, FORBES, <https://www.forbes.com/profile/pope-francis/#11d12fd06e0a> (last visited Nov. 10, 2018).

<sup>67</sup> See *Laudato Si: On Care for our Common Home*, United States Conference of Catholic Bishops, <http://www.usccb.org/about/leadership/holy-see/francis/pope-francis-encyclical-laudato-si-on-environment.cfm> (last visited Nov. 10, 2018); *The Pope's Moral Case for Taking On Climate Change*, THE ATLANTIC (June 18, 2015), <https://www.theatlantic.com/international/archive/2015/06/pope-francis-encyclical-moral-climate-change/396200>.

prosperity of humankind and protection of the environment. In the inspiring words of Pope Francis, “[n]eglecting to monitor the harm done to nature and the environmental impact of our decisions is only the most striking sign of a disregard for the message contained in the structures of nature itself. When we fail to acknowledge as part of reality the worth of a poor person. . . it becomes difficult to hear the cry of nature itself; everything is connected.”<sup>68</sup>

His Holiness the 14th Dalai Lama of Tibet is the spiritual leader of Tibet and Tibetan Buddhism.<sup>69</sup> He has achieved international recognition as a world leader, having received over 150 awards, honorary degrees, and prizes in recognition of his persistent advocacy for peace, human rights, universal responsibility, and compassion.<sup>70</sup> In 1989, he won the Nobel Peace Prize for his non-violent struggle for the liberation of Tibet.<sup>71</sup> His words are especially supportive of the Right, having said that “[i]f we unbalance Nature, humankind will suffer. Furthermore, as people alive today, we must consider future generations: a clean environment is a human right like any other. It is therefore part of our responsibility towards others to ensure that the world we pass on is as healthy, if not healthier, than when we found it.”<sup>72</sup> Thus, world political and spiritual leaders alike have leant their voices and influence to the call for action in support of the Right and in so doing have provided additional authority for the establishment of the Right in international customary law.

### III. WHY THE RIGHT TO A CLEAN ENVIRONMENT IS NEEDED

#### A. *The Environmental Law System that Developed Post-Silent Spring is Flawed and Failed to Produce a Clean, Sustainable Environment that is Supportive of Human Rights.*

In no small measure, the highly regulated environmental law system that developed in the post-Silent Spring era charted a new path forward for environmental protection and humankind’s relationship with the environment. The 1960s saw the birth of socially-conscious environmental activism and an increase in general concern for the protection of the environment around the world, which demanded that States act to protect human health and the environment from unbridled pollution.<sup>73</sup> In the United States, modern

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<sup>68</sup> POPE FRANCIS, ENCYCLICAL LETTER LAUDATO SI’ OF THE HOLY FATHER FRANCIS ON CARE FOR OUR COMMON HOME 87, ¶ 117, [http://w2.vatican.va/content/dam/francesco/pdf/encyclicals/documents/papa-francesco\\_20150524\\_enciclica-laudato-si\\_en.pdf](http://w2.vatican.va/content/dam/francesco/pdf/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si_en.pdf) (last visited Oct. 2, 2018).

<sup>69</sup> *Brief Biography*, HIS HOLINESS THE 14TH DALAI LAMA OF TIBET, <https://www.dalailama.com/the-dalai-lama/biography-and-daily-life/brief-biography> (last visited Nov. 10, 2018).

<sup>70</sup> *Id.*

<sup>71</sup> *Id.*

<sup>72</sup> *A Clean Environment is a Human Right*, HIS HOLINESS THE 14TH DALAI LAMA OF TIBET, <https://www.dalailama.com/messages/environment/clean-environment> (last visited 10/02/2018).

<sup>73</sup> *See* WORLD WIDE FUND FOR NATURE, THE MORGES MANIFESTO (1961) (an international declaration signed by the world’s leading conservationists for the purpose of saving the world’s

environmental law was born with its “polluter pays” philosophy and emphasis on end-of-pipe regulation.<sup>74</sup> The 1960s and 1970s saw the passage of massive environmental legislation such as the National Environmental Policy Act, the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, and the Endangered Species Act.<sup>75</sup> The 1980s brought the passage of the immense cradle-to-grave liability of Superfund, the Comprehensive Environmental Response, Compensation, and Liability Act.<sup>76</sup> In Europe, the 1967 Torrey Canyon oil spill disaster and resulting “black tides” along the French, British, and Belgian coastlines woke up an otherwise dosing continent to the environmental risks that a lack of forethought and planning had failed to prevent.<sup>77</sup> On the surface, at least, the world seemed to be paying attention. However, the environmental law system that developed failed to provide an environment supportive of human health and well-being capable of fulfilling the rights to life, water, food, and dignity of person. Indeed, millions of people are not free from hunger or thirst and live in deplorable environmental conditions, and the carrying capacity of the earth is within our sights.<sup>78</sup> We currently have a population approaching 7 billion, and E.O. Wilson, a leading biologist, predicts that the uppermost limit for the carrying capacity of the Earth is 10 billion.<sup>79</sup> And, the environment is more polluted than it has been in the history of humankind.<sup>80</sup>

A hard look at the existing policies in the U.S. and the throughout the world that support the current environmental law system further reveals that the current line of thinking is not adequately supportive of human rights or a clean, sustainable environment. The “polluter pays” principle is paramount to environmental law and represents the basic principle that polluters are financially responsible for the pollution that they cause, typically by way of payment of fines, penalties, and clean-up costs. While it can be said that

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wildlife); *50 Years of Achievements*, WWF, [http://wwf.panda.org/knowledge\\_hub/history/50\\_years\\_of\\_achievements](http://wwf.panda.org/knowledge_hub/history/50_years_of_achievements) (last visited Oct. 2, 2018); *Earth Day Across America, American Experience*, PUBLIC BROADCASTING SERVICE, <http://www.pbs.org/wgbh/americaneexperience/features/earthdays> (last visited 10/04/2018).

<sup>74</sup> *Superfund Enforcement: 35 Years of Protecting Communities and the Environment*, U.S. ENVTL. PROT. AGENCY, <https://www.epa.gov/enforcement/superfund-enforcement-35-years-protecting-communities-and-environment#pay> (last updated 11/07/2017).

<sup>75</sup> 43 U.S.C. § 1683, et. seq. (1969); 42 U.S.C. §§ 6901, 7401 (1970); 33 U.S.C. §1251, et. seq. (1972); 16 U.S.C. §1531, et. seq. (1973).

<sup>76</sup> 42 U.S.C. § 9601, et. seq. (1980).

<sup>77</sup> OXFORD HANDBOOKS, *THE OXFORD HANDBOOK OF THE MACROECONOMICS OF GLOBAL WARMING* 605 (Lucas Bernard & Willi Semmler eds., 2015).

<sup>78</sup> EDWARD O. WILSON, *THE FUTURE OF LIFE* (First Vintage Books ed. 2003); Natalie Wolchover, *How Many People Can Earth Support?*, LIVE SCIENCE (Oct. 11, 2011), <https://www.livescience.com/16493-people-planet-earth-support.html>.

<sup>79</sup> *Id.*

<sup>80</sup> Aradhana K. Tripathi, Christopher D. Roberts & Robert A. Eagle, *Coupling of CO2 and Ice Sheet Stability over Major Climate Change Transitions of the Last 20 Million Years*, 326 SCIENCE 5958, 1394-97 (2009).



“polluter pays” provides a just and equitable remedy, this framework also places a cost on polluting for which there will always be a market in societies that measure success in terms of rising gross domestic product (“GDP”). Continued adherence to GDP alone, irrespective of environmental and social externalities that are excluded from such equations or that are written-off as calculated risk that can be litigated in an effort to shift or spread liability to reduce exposure fails to place value on the things that matter with respect to the health and wellness of our planet and ourselves.

Because of the strict liability associated with environmental law, the “polluter pays” system has also resulted in environmental litigation becoming a big business on its own accord.<sup>81</sup> This often results in long, drawn-out, and expensive litigation in which blame is shifted to as many parties as possible in an effort to dilute liability, oftentimes leaving the degraded natural resource in a perpetually polluted state.<sup>82</sup> In that regard, “end-of-pipe” regulation controls, quite literally, what is discharged from a pipe or stack, such that it regulates what has been deemed acceptable levels of contaminants in air and water despite detailed environmental review, rather than designing better technologies and policies to prevent contamination in the first instance.<sup>83</sup> “End-of-pipe” regulation alone also fails to protect habitat and biodiversity, which the international community has embraced as an integral component of sustainable development.<sup>84</sup>

By way of another example as to how current environmental laws and policies have failed to achieve a clean, sustainable environment, advancements in solid waste management have created unintended gaps in the quest towards sustainability. It could be said that the solid waste management system in the U.S. has become almost too good. Since as early as the 1960s, with the passage of the Solid Waste Management Act, and then in 1976, with the passage of the

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<sup>81</sup> For example, the State of New Jersey filed the Passaic River litigation on November 22, 2005 against 7 named defendants for discharges of TCDD and other chemicals and compounds into the Passaic River and Newark Bay. Those original 7 impleaded more than 300 potentially responsible parties, including public and private entities to result in the largest environmental lawsuit ever filed in the state of New Jersey. The litigation ensued for 9 years and resulted in a \$355 million dollar settlement. Of that amount, \$150 million was recoupment of the State’s cleanup fees and litigation costs. The Settlement amount does not include the millions and millions of dollars in legal costs and attorneys’ fees incurred by the parties. The settlement funds are to be used for a large scale, multi-year cleanup plan and repair to natural resource damages that requires coordination between stated and federal officials. However, the Passaic River and Newark bay will never be clean until the combined sewage overflow system problem that is responsible for dumping raw sewage into New Jersey’s rivers is addressed. *N.J. Dep’t of Env’tl. Prot. et al. v. Occidental Chem. et al.*, No. ESX-L-9868-05 (N.J. Super. Ct. Law Div. Mar. 31, 2008).

<sup>82</sup> *Id.*

<sup>83</sup> See *End of Pipe Techniques*, GREEN FACTS: FACTS ON HEALTH AND THE ENVIRONMENT (Aug. 28, 2018), <https://www.greenfacts.org/glossary/def/end-of-pipe-techniques.htm>; see also 42 U.S.C. § 4321 et seq. (1970).

<sup>84</sup> See, e.g., *supra* notes 38-39; see also *supra* WILSON note 78, at 98-100 (discussing species extinction rates).

Resource Conservation and Recovery Act (“RCRA”), the United States has been regulating how garbage is treated, stored, transported, and disposed of. RCRA and the systems of state laws established to implement it have created a highly effective nation-wide system that has mostly eliminated the nuisances associated with garbage disposal. Old unlined municipal landfill relics have been closed and capped, waste collection trucks no longer spew litter as they drive down our roads, new super landfills offer seemingly endless disposal capacity, and recycling programs developed and expanded overtime to make us feel good. We even embraced a slogan and a mark - *reduce, reuse, recycle* – to promote smarter waste management.<sup>85</sup>

Unfortunately, however, the efficiency of the waste disposal system has fostered an out-of-sight, out-of-mind mentality that perpetuates unsustainable consumption patterns and a culture of waste.<sup>86</sup>

As we have come to take for granted that our trash will be whisked away before it has the opportunity to become inconvenient to us, we have lost touch with our responsibility to live in reciprocity with the earth and each other. Single-use plastics and the plastic grocery bag have become ubiquitous to daily life despite the millions of years they require to biodegrade and the harm they reap on our oceans and marine life. The rise in curb-side collection has shifted disposal and recycling responsibilities and costs onto consumers, rather than the corporations that design and generate product packaging to advance their profit margins. In short, “out of sight, out of mind” is not a sustainable waste disposal philosophy.

According to the EPA, the volume of waste generated in the United States has been on a steady and dramatic incline since the 1960s.<sup>87</sup> In 1960, total annual generation of municipal solid waste (MSW) in the U.S. was 88.1 million tons, in 1980 it was 151.6 million tons, and as of 2015, it had risen to 262.4 million tons.<sup>88</sup> While it may appear logical to consider that U.S. population growth is responsible for the increase in solid waste production, the EPA also reports that per capita municipal waste generation has also increased.<sup>89</sup> If we look back over the last 35 years from 1980, this means that total annual generation of municipal solid waste (MSW) in the U.S. increased by about 73% from 1980 to 2015.<sup>90</sup>

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<sup>85</sup> *Reduce, Reuse, Recycle Button*, SMITHSONIAN, [http://americanhistory.si.edu/collections/search/object/nmah\\_1284430](http://americanhistory.si.edu/collections/search/object/nmah_1284430) (last visited Nov. 10, 2018).

<sup>86</sup> See, e.g., Gaia Vince, *The High Cost of Our Throwaway Culture*, BBC (Nov. 29, 2012), <http://www.bbc.com/future/story/20121129-the-cost-of-our-throwaway-culture>.

<sup>87</sup> U.S. ENVTL. PROT. AGENCY, ADVANCING SUSTAINABLE MATERIALS MANAGEMENT: 2015 FACT SHEET 2 (2018).

<sup>88</sup> *Id.*

<sup>89</sup> *Nat'l Overview: Facts and Figures on Materials, Wastes, and Recycling*, EPA, <https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/national-overview-facts-and-figures-materials> (last visited Nov. 12, 2018); *Resident Population of the U.S. from 1980 to 2017*, STATISTA, <https://www.statista.com/statistics/183457/united-states--resident-population> (last visited Nov. 12, 2018).

<sup>90</sup> See *id.*; CTR. FOR SUSTAINABLE SYS., UNIV. OF MICH., MUNICIPAL SOLID WASTE

These numbers are astounding, especially in light of recycling rates, which according to the EPA hover at around a third of all MSW generated.<sup>91</sup> At the city level, New York reports that it captures 44% of recyclable material through its recycling program.<sup>92</sup> While this is a positive step forward overall especially for a city as large as New York, the City also reports that the capture rate for single-use plastic dishware, for example, is only 5%.<sup>93</sup>

Recyclables are a commodity and as such, there are underlying economics at play that determine the marketability of recyclables and ultimately, whether it will be cheaper to recycle or landfill the waste. While I served as the Solid Waste Program Counsel for the State of New York I came to learn that because recycling was tied to the marketability of the material it was not mandatory, and that once out of sight, the well-intentioned cleaned and sorted recyclables placed curbside by consumers were often co-mingled back into the garbage and landfilled. Common misconceptions continue today as to the types of products that can be recycled and the overall efficacy of recycling programs in general.

This recycling paradigm is but another example of how we as a society have allowed environmental externalities – in this case, the cost to the environment of allowing our waste generation to grow and recycling only when the price is right – to be built into our system of laws. While the current systems look at the economics of recycling in monetary terms of how much will it cost to recycle a product, what we need to ask is how much will it cost us to continue to allow our waste generation to grow and to fail to achieve higher recycling rates in terms of natural resource and energy consumption and the production of greenhouse gas emissions. Landfill gas, for example, is composed of about 50% methane and 50% carbon dioxide and MSW landfills are the third-largest source of human-related methane emissions in the United States.<sup>94</sup>

If we look back at the history of recycling, we see that it evolved out of scarcity and a desire to maximize value rather than out of environmental altruism.<sup>95</sup> However, as waste consumption grew, recycling came to be viewed as a much needed means to prevent litter and to protect the environment and thus, make people feel like they could negate the deleterious effect of our

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FACTSHEET (2018).

<sup>91</sup> See *Municipal Solid Waste*, U.S. ENVTL. PROT. AGENCY, <https://archive.epa.gov/epawaste/nonhaz/municipal/web/html> (last visited June 18, 2018) (stating that in 2013, the recycling rate was 34.3%, which equates to 1.51 pounds of waste recycled per person to the 4.40 pounds of waste generated per day).

<sup>92</sup> See Daniel Huber, *How Much of the City's Curbside Recyclables Gets Properly Recycled?*, N.Y.C. INDEP. BUDGET OFF. (July 14, 2016), <https://ibo.nyc.ny.us/cgi-park2>.

<sup>93</sup> *Id.*

<sup>94</sup> See *Basic Information about Landfill Gas and Methane Emissions from Landfills*, ENVTL. PROTECTION AGENCY, <https://www.epa.gov/lmop/basic-information-about-landfill-gas> (last visited Oct. 18, 2018).

<sup>95</sup> *The History of Recycling is More Complicated Than You Might Think*, TIME MAGAZINE, <http://time.com/4568234/history-origins-recycling> (last visited Oct. 18, 2018).

growing consumerism.<sup>96</sup> In the 1980s, many states saw recycling as a means to prevent road-side litter and enacted bottle-deposit laws to encourage consumers to return and reuse rather than dispose of bottles.<sup>97</sup> This was a good thing since bottle bill programs, as they are routinely called, are tremendously successful in creating clean, single-stream sources of recyclables and in obtaining higher recycling rates than curb-side programs.<sup>98</sup> While some states have expanded their bottle bills in recent years, there have also been calls to eliminate bottle bills as unnecessary in light of growth in municipal curb-side recycling programs and because bottle bill compliance creates added costs for bottlers and distributors. This would be a reckless retreat in waste reduction given the higher recycling rates achieved by bottle bills.

The efficacy of recycling in relation to overall waste consumption pales in comparison to the feel good, altruistic scheme that has been sold to the American public. Recycling, for all its benefits, has in large measure been a great fraud perpetrated on the American public. Recycling programs enable environmentally conscious consumers to feel like they are taking an active role in protecting the environment and are a way for governments to pull society forward into a new paradigm; these are good things. People want to believe that they are making a difference and that the time and effort they invest in sorting their trash results in the recyclables being recycled, not landfilled. However, this is not always the case. Greater transparency regarding the truths of the holistic effects of throw-away culture mentality is a needed to build better laws and policies that support long term sustainability and ultimately, the Right. If the current system continues unabated, we as a society will continue to perpetrate an injustice not only on the earth, but to ourselves for the earth is the source of our prosperity.

*B. The Current Philosophy Underlying the Global Economy Does Not Support Sustainable Development or the Protection of Human Rights of the Poor.*

Despite Rachel Carson's passionate exposé of the dangers of industrialization and chemical pollutants and the scores of environmental treaties, laws, and regulations that had henceforth come into existence, humankind has largely carried on business-as-usual as evidenced above. This unfortunate course has

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<sup>96</sup> *Id.*

<sup>97</sup> *Id.*; see, e.g., Cal. Pub. Res. Code § 14500 et. seq. (California Beverage Container Recycling and Litter Reduction Act); N.Y. Env'tl. Conserv. Law § 27-1001 et seq. (New York State Returnable Container Act); Iowa Code Title XI, Subtit. 1, Ch. 455C (Iowa's Beverage Container Control Law).

<sup>98</sup> See e.g., N.Y. STATE ASS'N OF COUNTIES, BOTTLE BILL WHITE PAPER (2016), <http://www.nysac.org/files/NYSAC%20Bottle%20Bill%20White%20Paper.pdf> (last visited Oct. 18, 2018) (reporting that New York's Bottle Bill achieved a 70% return rate on covered containers in 2016 and has resulted in the recycling of more than 90 billion containers since its enactment in 1982).

promoted industrialization and capitalistic profitability paradigms, catered to Western consumption patterns, and has relied on GDP as the indicator of a state's prosperity, while turning a blind eye to environmental and social externalities that lingered and indeed grew, despite the heavy onus that national and international environmental legal systems had placed on polluters and States.<sup>99</sup> Not long after we had entered the new millennium, the perceived economic prosperity of Western economies collapsed in 2008-2009, revealing the underlying instability of their foundation. The financial and economic crises that ensued revealed insecure risk, over-valued collateral, and disturbing philosophies that recklessly sought to promote economic growth at the peril of good sense and prudence.<sup>100</sup> The U.S. fell into the deepest financial and economic depression since The Great Depression of the 1930s, the Euro Crises encapsulated Europe, and the world economy crumbled, dragging the world's poor down with them.<sup>101</sup> The United Nations estimated that between 47 to 84 million more people fell into or remained trapped in extreme poverty as a result of the financial crisis.<sup>102</sup> As will be addressed in more detail below, change is required in how economies are valued if the flaws of the current environmental and human rights law regimes are to be addressed in time to keep global temperatures at sustainable levels and to ensure accessibility of basic human rights to the poor.

*C. The Right Will Remove the Duality in the Environmental and Human Rights Law Systems.*

The failures of the environmental law system and business-as-usual attitudes identified above are, for the most part, not due to a lack of regulation or litigation, but rather because of the fundamentally flawed philosophy that underlies the environmental law system itself. Valuation of the earth in terms of the market value of its resources, regardless of whether such exploitation leads to the violation of the human rights of others as well as unsustainable pollution levels and consumption patterns, fails to provide a healthy planet capable of supporting the basic needs and human rights of our most vulnerable people and impinging on the human rights of every person on the planet.

Beyond the flaws of the environmental law system alone, the underlying duality of the environmental law and human rights law systems must also be addressed if future generations of our growing world, especially those born poor

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<sup>99</sup> See, e.g., UNITAR, *Chapter 2, Traditional Development Patterns and Their Limitations*, in INTRODUCTION TO A GREEN ECONOMY: CONCEPTS AND APPLICATIONS, MODULE 1 (2013).

<sup>100</sup> *The Origins of the Financial Crisis: Crash Course*, THE ECONOMIST, <http://www.economist.com/news/schoolsbrief/21584534-effects-financial-crisis-are-still-being-felt-five-years-article> (last visited Mar. 14, 2017).

<sup>101</sup> U.N. DEPT OF ECON. & SOC. AFFAIRS, THE GLOBAL SOCIAL CRISIS: REPORT ON THE WORLD SOCIAL SITUATION 2011, U.N. Sales No. E.10.IV.12 (2011).

<sup>102</sup> *Id.*

in developing and least developed countries, are able to enjoy the essentials of life; adequate clean water, sufficient and nutritious food, and the dignity of what it means to be human. We must move away from a dualistic paradigm, which views environmental protection and sustainability on the one hand, and the protection of basic human rights on the other hand as separate and distinct elements of what is needed to simply live.<sup>103</sup> We must advance to a philosophy that unites the 2 systems through recognition of the communal obligation we all share with the earth and each other to create communities that support a clean sustainable environment supportive of human rights. We must finally dispel the notion that there is a right to exploit the earth's natural resources to the detriment of others. We must affirm unequivocally that there exists an inextricable nexus between a clean, sustainable environment and the full realization of human rights and that one cannot exist without the other. We must yield to the larger truth that when we self-promote without taking responsibility for the effect of our actions on others or the earth, we all lose in the long run. It is not enough that the 2 systems are regarded as complimentary or related. We must arrive at a point where humankind – states, individuals, and non-government actors alike – recognize that what was heretofore regulated as a diversity of interests in is in fact the same interest. Formal recognition of the Right and its application as a tool to combat climate change will do that.

Modern society has come to quickly take for granted the benefits of a connected world – technological advances allow us to connect instantly and virtually to an endless bank of information and such connections rather invisibly connect us to each other and the larger world in which we live, whether knowingly or not. The internet, social media, and moreover, the data age in which we live are the undeniable modern examples of the inter-connectedness of our world; of the people, places, and things that create and fill our lives. Humankind's connection with the Earth is no different. The natural world and all its complexity is the primal, primordial metadata that has pervaded and guided our lives since the dawn of time. Our daily lives are penetrated by invisible organisms, molecules, and compounds, as well as the sights and sounds of nature, which combine to form our reality. Few people today could say that electronic connections have not permeated their lives in a meaningful way; why then do we continue to perpetuate separation between ourselves and the environment to our detriment? Before it is too late we must come to recognize that on the most fundamental level it is the natural, primordial metadata that creates and influences our world and we must act to protect it for our prosperity depends upon it. Recognition of the Right, as a hybrid environmental-human right is the needed next step in the evolution of global efforts to preserve our planet for future generations and to ensure greater equality among all people.

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<sup>103</sup> See, e.g., *Human Rights and the Environment*, U.N. ENVIRONMENT PROGRAMME, <http://web.unep.org/divisions/delc/human-rights-and-environment> (last visited Oct. 18, 2018).

D. *World Population Growth and Extreme Poverty Projections Will Further Erode the Human Rights of the Poor.*

World population growth over the next century, primarily in Sub-Saharan Africa and least developed nations, will challenge the ability of governments to provide future populations with sufficient resources such as clean water and adequate food that they need to survive. Establishment of the Right would enable people, and in this regard the poor, to demand that governments provide an environment in which the basic human rights necessary for survival are guaranteed.

As of mid-2015, world population reached 7.3 billion, which indicated that the world added an astonishing one billion people in the span of just 12 years.<sup>104</sup> Today, an additional 83 million people are added annually.<sup>105</sup> World population is projected to reach 8.5 billion by 2030, 9.7 billion by 2050 and 11.2 billion by 2100.<sup>106</sup> Further, more than half of global population growth between now and 2050 is expected to occur in Africa.<sup>107</sup> This means that of the 8.5 billion people expected to be added to global population by 2050, 1.3 billion will be added in Africa.<sup>108</sup> Africa is the only geographic area anticipated to experience substantial population growth over the next 32 years.<sup>109</sup> Such growth rates are particularly alarming because according to UNEP, “[i]n a survey of 65 different estimates of the Earth’s carrying capacity, given current infrastructure and consumption patterns, the majority of estimates put the Earth’s limit at or below 8 billion, a number we will exceed in about 15 years.”<sup>110</sup>

The challenges that will be presented by the projected population growth in Africa are further exacerbated by global poverty rates for the region. According to the World Bank’s most recent estimates from 2018, 736 million people are poor, meaning that they live on less than \$1.90 a day.<sup>111</sup> Even though the number of people living in poverty has declined since 1990 highs and as recently as 2015, the reductions have been geographically uneven, being largely the

<sup>104</sup> U.N. DEPT OF INT’L ECON. & SOC. AFFAIRS, POPULATION DIV., WORLD POPULATION PROSPECTS: THE 2015 REVISION, KEY FINDINGS AND ADVANCE TABLES, at 1, Working Paper No. ESA/P/WP.241 (2015).

<sup>105</sup> *Id.* at 2.

<sup>106</sup> *Id.*

<sup>107</sup> *Id.* at 3.

<sup>108</sup> *Id.* at 3-4.

<sup>109</sup> *See id.* (stating that world population growth rates are based on a medium projection variant, which assumes a decline in fertility in North America, Latin America, Europe, the Caribbean and Oceania, and stating that a “high fertility” country is a country in which the average woman bears 5 or more children over her lifetime).

<sup>110</sup> Bruce Pengra, *One Planet, How many people? A Review of Earth’s Carrying Capacity*, UNEP GLOB. ENVTL. ALERT SERV., [https://na.unep.net/geas/archive/pdfs/GEAS\\_Jun\\_12\\_Carrying\\_Capacity.pdf](https://na.unep.net/geas/archive/pdfs/GEAS_Jun_12_Carrying_Capacity.pdf) (last visited Oct. 18, 2018).

<sup>111</sup> WORLD BANK, POVERTY AND SHARED PROSPERITY 2018: PIECING TOGETHER THE POVERTY PUZZLE, OVERVIEW BOOKLET 2 (2018).

result of reductions in Asia and the Pacific.<sup>112</sup> Sub-Saharan Africa, on the other hand, is home to more than half of the world's poor and poverty there is increasing.<sup>113</sup> The World Bank further estimates that the number of people living in poverty in the Sub-Saharan Africa has grown from an estimated 278 million in 1990 to 413 million in 2015.<sup>114</sup> Whereas the average poverty rate for other regions was below 13 percent as of 2015, the rate for Sub-Saharan Africa was about 41%.<sup>115</sup> Additionally, 27 of the world's 28 poorest countries are in Sub-Saharan Africa, all with poverty rates above 30 percent.<sup>116</sup> These rates have caused the World Bank to conclude that extreme poverty is increasingly becoming a Sub-Saharan African problem.<sup>117</sup> The World Bank also notes that many of the poor disproportionately live in rural areas, making them vulnerable to extreme weather events and other disruptions cause by the climate.<sup>118</sup> The people represented by these numbers are fragile, precariously dependent upon often unstable and inadequate infrastructure, and are further put at risk by conflict, a rapidly changing climate, and economic shocks.<sup>119</sup> If we accept this data as true, Africa is on a trajectory for another wide-scale famine with the migration and conflict that typically accompany it, and we will have challenged the earth beyond her carrying capacity given current infrastructures and consumption patterns.

When one compares the numbers presented by the United Nations on population growth and the World Bank on extreme poverty with the looming effects of climate change, as discussed below, it becomes patently clear that another humanitarian crisis for Sub-Saharan Africa is brewing. The human rights of these future lives will be no less worthy of protection of their human rights than any of us alive today. Like us, they will need clean water to drink, adequate food to eat, clean air to breath, and clean soil upon which to live and grow their crops. These lives, these people, who will be sisters of our sisters, friends of our friends, and children of our children will be endowed with the right to live a life of dignity that is inalienable and be blessed with the endowment of human rights from which they cannot be asked to choose one over the other, or to establish a hierarchy within their ranks. The survival of such future generations depends upon us, on our willingness to expand the concept of our own identity, of our "self" to include consideration of theirs. They will be human, they will be us, and like us, they will have the right to a clean

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<sup>112</sup> *Id.*

<sup>113</sup> *Id.* at 3.

<sup>114</sup> *Id.* at 3.

<sup>115</sup> *Id.*

<sup>116</sup> *Id.*

<sup>117</sup> *Id.*

<sup>118</sup> *Id.* at 8.

<sup>119</sup> *Id.* at 8-9; UNEP, TOWARDS A GREEN ECONOMY: PATHWAYS TO SUSTAINABLE DEVELOPMENT AND POVERTY ERADICATION (2011).



environment, which naturally and inherently supports the dignity of life in its most beautiful form.

#### IV. HOW THE RIGHT TO A CLEAN, ENVIRONMENT WILL MAKE A DIFFERENCE FOR ENVIRONMENTAL PROTECTION AND HUMAN RIGHTS

##### A. *The Right Can be Used as an Effective Tool to Combat Climate Change*

Climate Change threatens the existence of the earth's inhabitants and interferes with the human rights of the poor. Despite the politicization of climate science, 97 percent or more of actively publishing climate scientists agree that global warming trends over the past century are extremely likely due to human activities.<sup>120</sup> Climate change science continues to reveal unprecedented changes in the earth's atmosphere that have had and are projected to continue to have deleterious effects on factors directly related to the sustainability of life on this planet as humankind has come to understand it. For example, the Intergovernmental Panel on Climate Change ("IPCC"), the UN body for assessing the science related to climate change, concluded in 2013 that, "[w]arming of the climate system is unequivocal . . . the atmosphere and oceans have warmed, the amounts of snow and ice have diminished, sea level has risen, and the concentrations of greenhouse gases have increased."<sup>121</sup> More recently, in 2018, the IPCC determined that an increase in global temperature above 1.5 degrees Celsius would likely result in irreversible and long-lasting effects and loss of some ecosystems.<sup>122</sup> And, that limiting global warming to 1.5 degrees Celsius would require "rapid and far-reaching" transitions in land, energy, industry, buildings, transport, and cities.<sup>123</sup>

Within the U.S., the Global Change Research Act of 1990 mandates that the U.S. Global Change Research Program (USCRP) deliver a report to Congress and the President no less than every 4 years that provides a national climate assessment on global warming and related issues.<sup>124</sup> The USCRP's most recent report, released on November 23, 2018 concluded, *inter alia*, that the impacts of climate change are already being felt in communities across the country, climate-related impacts have and will disproportionately impact the poor, climate change will have a negative impact on the existing economy, and that failures in critical systems, such as water resources, food production and

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<sup>120</sup> *Scientific Consensus: Earth's Climate is Warming*, NASA, <https://climate.nasa.gov/scientific-consensus> (last visited Oct. 18, 2018).

<sup>121</sup> IPCC, CLIMATE CHANGE 2013: THE PHYSICAL SCIENCE BASIS, SUMMARY FOR POLICYMAKERS 4 (2013).

<sup>122</sup> See IPCC, GLOBAL WARMING OF 1.5°, SUMMARY FOR POLICYMAKERS (2018).

<sup>123</sup> *Id.*

<sup>124</sup> 15 U.S.C. §56A *et seq.* (1990); see, e.g., USGCRP, IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES: FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME II: REPORT-IN-BRIEF (D.R. Reidmiller et al. eds., 2018).

distribution, energy, public health, and security should be expected.<sup>125</sup>

The amount of scientific evidence of climate change, the overwhelming likelihood of its anthropogenic causes, and the lack of progress towards keeping global temperatures from warming above 1.5 degrees Celsius further reveals the dysfunction of current environmental and human rights law regimes, as well as the limitations of international agreements (in terms of a lack of mandatory compliance and enforcement), to provide a clean, sustainable environment supportive of human rights. Recognition and enforcement of the Right as a fundamental human right is the needed catalyst for the unprecedented scope of changes needed to meet the challenges of climate change.

B. *Trail Smelter Rewind: Looking Back to Move Climate Change Litigation Forward.*

In further support of the Right, a fresh look at the Trail Smelter Case provides valuable precedent. While the Trail Smelter cases are well known for their establishment of the “polluter pays” system, they can also be looked to for precedent for a holding of liability upon a state or private corporation under U.S. and international law in tort for the release of a greenhouse gas, even where empirical data as to the effects of the release of such gas are in dispute. The 1941 Trail Smelter Tribunal held that,

[U]nder the principles of international law, as well as the law of the United States, no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence.<sup>126</sup>

The 1941 Tribunal further held,

[i]t is a fair and reasonable demand on the part of a sovereign that the air over its territory should not be polluted on a great scale by sulphurous acid gas, that the forests on its mountains, be they better or worse, and whatever domestic destruction they may have suffered, should not be further destroyed or threatened by the act of persons beyond its control, that the crops and orchards on its hills should not be endangered from the same source. The possible disaster to those outside the State must be accepted as a consequence of her standing upon her extreme rights.<sup>127</sup>

Thus, we see that at about the same time that the international community was placing limitations on the sovereignty of Nazi Germany in the 1940s (drawing

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<sup>125</sup> USGCRP, *supra* note 124; *see also*, USGCRP, FOURTH NATIONAL CLIMATE ASSESSMENT, SUMMARY FINDINGS (D.R. Reidmiller et al. eds., 2018), [https://nca2018.globalchange.gov/downloads/NCA4\\_Ch01\\_Summary-Findings.pdf](https://nca2018.globalchange.gov/downloads/NCA4_Ch01_Summary-Findings.pdf).

<sup>126</sup> Trail Smelter Case, *supra* note 11, at 1965.

<sup>127</sup> *Id.*

from the domestic laws of the UN member states to create new international crimes<sup>128</sup>) to direct and manage activities within its borders, the Trail Smelter Tribunal looked to international and domestic U.S. case law precedent to curtail the rights of Canada and a private corporation to find causation for damages occurring outside of Canada's borders and to force the polluter to pay for the resulting damages. Liability was found despite a lack of specific international law or regulations on emission standards, as well as inconclusive data and battling experts.<sup>129</sup> On a global scale, the mindset of the 1940s seemed to embrace the concept that the sovereignty of the one to rule and/or engage in business must yield to the equally sovereign right of the other to enjoy clean air, water, and soil, and the dignity of what it means to be human. Despite decades of environmental regulation, today is no different; all people are entitled to a clean, healthy sustainable environment just as much today as we were in 1941. As the Trail Smelter Tribunal put it, referencing Professor Eagleton, "A State owes at all times a duty to protect other States against injurious acts by individuals from within its jurisdiction."<sup>130</sup>

An important aspect of the 938 decision of the Tribunal explains the evidentiary standard for a finding of causation in such situations, holding that, "[w]here the tort itself is of such a nature as to preclude the ascertainment of the amount of damages with certainty, it would be a perversion of fundamental principles of justice to deny all relief to the injured person, and thereby relieve the wrongdoing from making any amend for his acts."<sup>131</sup> What is important to note here is that despite submission of an abundance of technical data, expert testimony, and zealous legal argument supporting both state's positions, the Court reasoned its own conclusion and fashioned its own remedy, finding both sides to have drawn conclusions unsupported by the evidence.<sup>132</sup> The 1938 tribunal specifically noted that in the face of questions of fact and opposing expert testimony, juries act as the finders of fact, not governments or politicians. "Juries are allowed to act upon probable and inferential, as well as direct and positive proof."<sup>133</sup> Thus, even within the "clear and convincing" evidentiary standard set out in the 1941 decision, absolute certainty of causation is not required. The Tribunal found liability in common tort law, despite a lack of national or international standards on emissions – or cross-border emissions – of a greenhouse gas, sulphur dioxide. Arguably, the same could be done today. If

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<sup>128</sup> See, e.g., *The Influence of the Nuremberg Trial on International Criminal Law*, THE ROBERT H. JACKSON CENTER, <https://www.roberthjackson.org/speech-and-writing/the-influence-of-the-nuremberg-trial-on-international-criminal-law> (last visited Oct. 18, 2018).

<sup>129</sup> See Trail Smelter Case, *supra* note 11.

<sup>130</sup> Trail Smelter Case, *supra* note 11, at 1963 (citing PROFESSOR EAGLETON, RESPONSIBILITY OF STATES IN INTERNATIONAL LAW 80 (1928)).

<sup>131</sup> *Id.* at 1920.

<sup>132</sup> *Id.* at 1921-22.

<sup>133</sup> *Id.* at 1920 (tribunal quoting from Michigan Supreme Court case, and citing it with approval).

so, the Right could serve as an additional tool in the climate activist's arsenal to impose climate change standards to ensure that global temperatures are kept well below 2 degrees Celsius.

*C. To Facilitate a Paradigm Shift in Environmental and Human Rights Regimes*

Recognition of the Right as customary international law will help facilitate the change in thinking needed to ameliorate the failure of the current environmental law system as discussed above to provide a clean, sustainable environment that is simultaneously protective of the basic human rights needed for survival. If the everyday person or even a poor, marginalized person or group of persons could demand fulfillment of the Right, human rights and climate change activism could be empowered from the ground-up. Advocacy for the Right could serve to fill the gap where strong top-down leadership is lacking to ensure that the much needed long-term systemic changes as addressed herein are not downplayed or ignored for short-term economic gains. Further, demand for the Right and ultimately, international recognition of the Right, will help to pull the world out of the prevailing anthropocentrism mindset.

*D. To Provide an Enforcement Mechanism to International Agreements.*

The Right is ready to be seized by activists in the United States to demand the policy and statutory changes necessary to halt the effects of climate change and ensure our planetary survival. Unless and until people begin to demand that their human right to a clean environment is recognized and upheld the existing paradigms, as discussed herein, will continue to lead us down the same path that brought us to the current climate crisis. The Right is available for people to demand smarter, sustainable energy and transportation policies that provide long-term solutions to climate change, and to prevent the U.S. from withdrawing from the Paris Agreement and the UNFCCC. With the Right in hand, legal claims could be made not only for typical property and economic damage as a result of environmental liability, but also for violations of one's human rights.

Establishment of the Right may serve to fill the enforcement gap of rights established under international treaties, which are traditionally unenforceable on an individual level. Working off the accepted norm that human rights agreements are entered into for the benefit of the citizens of the contracting party, rather than in the traditional international law context of mutual party benefit,<sup>134</sup> it may be possible for individuals to enforce the Right under the third-party beneficiary theory of contract when it can be claimed under a ratified treaty. If citizens are the intended beneficiaries of international human rights agreements, then an argument could be made for individual enforceability of the

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<sup>134</sup> DE SCHUTTER, *supra* note 6, at 118.

Right to a clean environment as the intended beneficiaries of the agreements. Enforcement under the third-party beneficiary theory of contract would thereby bring a level of enforceability and activism to both environmental and human rights treaties not before seen. While this may be regarded as a huge leap, third-party beneficiary theory of contract is well-accepted law, as is the right of states to sue on behalf of their citizens.<sup>135</sup> Greater enforcement of environmental and human rights agreements is necessary to hold governments accountable and evoke change. Climate change is thankfully not a world war, but it is perhaps the greatest current threat to all of humanity and the clock is ticking.

#### V. CONCLUSION

We have now reached a turning point in humankind's relationship with the earth: the last fifty-five+ years of comprehensive national and international environmental regulation, advancements in the international human rights regime, and more recently, efforts to combat climate change have not resulted in a clean, resilient environment that supports the basic needs of the poor or those of future generations and which will likely only be further challenged by global population growth. In the words of Rachel Carson, "[i]f the Bill of Rights contains no guarantee that a citizen shall be secure against lethal poisons . . . it is surely only because our forefathers, despite their considerable wisdom and foresight, could conceive of no such problem."<sup>136</sup> Just like our understanding of the factors that compromise our environment has advanced beyond "lethal poisons," so has our understanding of the problems of enduring poverty, human rights, and unsustainable management of our Earth. We now have the wisdom that our forefathers lacked and therefore a duty to take a bold step forward to ensure the protection of the environmental and the human rights of our future ancestors and, moreover the preservation of our planet. We need to build on the progress made and tap into the rising global achievements already attained by governments, industry, and individuals alike to have the courage to change the systems that threaten our survival. It is now time to journey onto a new road, one of a human-rights based approach to environmental protection through the demand for, and clear and unequivocal establishment of, the human right to a clean environment.

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<sup>135</sup> See, e.g., *Subaru Distribs. Corp. v. Subaru of Am., Inc.*, 425 F.3d 119, 124 (2d Cir. 2005) (quoting Restatement (Second) of Contracts § 302 (Am. Law Inst. 1981)); *Massachusetts et al. v. Evtl. Protection Agency et al.*, 549 U.S. 497 (2007).

<sup>136</sup> See CARSON, *supra* note 1, at 12-13.