### **American University Washington College of Law**

From the SelectedWorks of David B. Hunter

2010

# Human Rights Implications for the Climate Negotiations

David B. Hunter



#### DAVID B. HUNTER\*

## **Human Rights Implications for Climate Change Negotiations**

I.	Linking Human Rights to Climate Change				
	A.	The Inuit Petition to the Inter-American Commission.	335		
	В.	The Small Island States	337		
II.	Implications of the Human Rights Perspective				
	A.	Legal Liability for Human Rights Violations	340		
	B.	The Moral Authority of Human Rights	343		
		1. Rights to the Atmosphere	345		
	C.	Bringing New Voices to the Climate Debate	347		
		1. Vulnerable and Disadvantaged Groups	349		
		2. Expanding Human Rights Institutional Voices			
	D.	Shaping Mitigation Responses	354		
		1. Biofuels	354		
		2. Reduced Emissions from Deforestation and			
		Forest Degradation (REDD)	356		
	E.	Prioritizing Adaptation			
Cond	منعبيك	• .	361		

According to John Holdren, the Science Advisor to President Obama, humanity can only respond to climate change in three ways. We can mitigate climate change, for example by reducing greenhouse gas emissions; we can adapt to climate change, for example by defending our coastlines; or we can suffer from climate change.<sup>1</sup>

<sup>\*</sup> Associate Professor of Law, American University Washington College of Law, and Member Scholar of the Center for Progressive Reform. This Article was written prior to the negotiations that resulted in the Copenhagen Accord and for the most part does not reflect the outcome of those negotiations.

<sup>&</sup>lt;sup>1</sup> John P. Holdren, Meeting the Climate-Change Challenge, Eighth Annual John H. Chafee Memorial Lecture on Science and the Environment, Jan. 17, 2008, at 5, available at http://www.ncseonline.org/Conference/Chafee08final.pdf; see also Intergovernmental Panel on Climate Change [IPCC], Working Group I, Contribution of Working Group I to

Given current emission levels and projected climate change impacts, we are inevitably going to do some of all three. A human rights approach, the subject of this Article, puts the focus on those who will suffer from climate change, in the hopes of building the political will to compel humanity to put more resources into both adapting and mitigating climate change.

If left unaddressed, climate change will have significant and adverse impacts on the quality of human life; many observers now discuss those impacts in human rights terms.<sup>2</sup> In general, climate change threatens the achievement of sustainable levels of development necessary for the fulfillment of economic, social, and cultural rights. In particular, climate change impacts have been linked to the right to life,<sup>3</sup> the right to health,<sup>4</sup> the right to adequate food,<sup>5</sup> the right to adequate water,<sup>6</sup> the right to housing,<sup>7</sup> and the right to self-

the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, at 18 (2007), available at http://www.uclm.es/area/amf/Antoine/Fusion/Ipcc\_anotado.pdf [hereinafter IPCC 2007: Physical Science Basis].

- <sup>2</sup> See, e.g., Submission of the Maldives to the Office of the U.N. High Commissioner for Human Rights [OHCHR], Human Rights and Climate Change (Sept. 25, 2008) available at http://www.ciel.org/Publications/Maldives/Maldives\_Submission\_29Sep08.pdf [hereinafter Maldives Submission]; John H. Knox, Climate Change and Human Rights Law 50 VA. J. Int'l L. (forthcoming 2009); Siobhán McInerney-Lankford, Climate Change and Human Rights: An Introduction to Legal Issues, 33 HARV. ENVIL. L. REV. 431 (2009); Amy Sinden, Climate Change and Human Rights, 27 J. LAND RESOURCES & ENVIL. L. 255 (2007); Sara C. Aminzadeh, A Moral Imperative: The Human Rights Implications of Climate Change, 30 HASTINGS INT'L & COMP. L. REV. 231 (2007); SVITLANA KRAVCHENKO & JOHN E. BONINE, HUMAN RIGHTS AND THE ENVIRONMENT: CASES, LAW, AND POLICY 549–96 (2008); CHRIS WOLD, DAVID HUNTER & MELISSA POWERS, CLIMATE CHANGE AND THE LAW 426–41 (2009).
- <sup>3</sup> Climate change may impair the right to life because the increasing intensity of hurricanes, droughts, and other severe weather events may increase the loss of life due to natural disasters. Some tropical diseases may also spread as a result of global warming, leading to loss of life. U.N. Human Rights Council [UNHRC], *Annual Report of the United Nations High Commissioner for Human Rights and Reports of the Office of the High Commissioner and the Secretary General*, ¶¶ 21–24, U.N. Doc. A/HRC/10/61 (Jan. 15, 2009) [hereinafter *OHCHR Report*]; Maldives Submission, *supra* note 2, at 42–45.
- <sup>4</sup> OHCHR Report, supra note 3, ¶¶ 31–34; Maldives Submission, supra note 2, at 53–54.
- <sup>5</sup> Climate change has implications for a right to food because changes in local and regional climate will change local agricultural conditions. In some cases, centuries of traditional knowledge of how to grow crops in specific areas will be obsolete. Increased droughts and desertification will also reduce yields in many areas. In addition to these direct impacts, certain climate change mitigation policies (most notably reliance on growing biofuels for energy) may impact food prices and availability. *OHCHR Report*, *supra* note 3, ¶¶ 25–27; Maldives Submission, *supra* note 2, at 48–51.
- 6 Climate change will have an impact on States' ability to fulfill the right to water. Increasing droughts and floods, particularly declining snow packs, will result in less water

determination.<sup>8</sup> Climate change's impacts on human rights are not going to be equally felt; the rights of the poor, of politically marginalized communities and groups, and of future generations, are particularly at risk.<sup>9</sup>

How we respond to climate change may also give rise to human rights violations, and a rights-based approach might assist us in prioritizing among otherwise equivalent responses. For example, many biofuels are less attractive alternatives when viewed from the perspective of their impact on food prices and the right to food. <sup>10</sup>

In the past few years, the increasingly clear human rights implications of climate change have led many observers to explore how to bring human rights law and institutions to bear on the climate issue.<sup>11</sup> In some instances, human rights have been seen as providing a basis for litigation or direct advocacy.<sup>12</sup> For example, the Inuit

being available for basic human needs throughout the world. Most acutely affected will be areas already suffering from desertification, such as the American Southwest, or areas in which a large number of people rely on a relatively few number of water bodies. *OHCHR Report*, *supra* note 3, ¶¶ 28–30; Maldives Submission, *supra* note 2, at 54–56.

- 7 Particularly as climate change exacerbates natural disasters like droughts, hurricanes, and floods, more people will be pushed from their homes. This interferes with their right to housing. Additionally, the right to housing implies a right to be provided shelter that meets basic hygiene needs during disasters. Many countries, particularly developing countries, will be increasingly stressed in ensuring that their populations have their right to housing satisfied. *OHCHR Report*, *supra* note 3, ¶¶ 35–38; Maldives Submission, *supra* note 2, at 51–52.
- 8 See generally OHCHR Report, supra note 3, ¶¶ 39–41. The Inuit petition alleged, among other things, that the impact of climate change on the way of life of the Inuit will decimate their culture and destroy their right to self determination. Petition to the Inter American Commission on Human Rights Seeking Relief from Violations Resulting from Global Warming Caused by Acts and Omissions of the United States, at 35–67, 94 (submitted by Sheila Watt-Cloutier) (Dec. 7, 2005), http://www.ciel.org/Publications/ICC\_Petition\_7Dec05.pdf [hereinafter Inuit Petition]. The same threat is posed to island cultures as whole countries may be inundated as early as the next few decades. See Neil MacFarquhar, Refugees Join List of Climate-Change Issues, N.Y. TIMES, May 29, 2009, at A4 (discussing the impact of climate change on island communities).
- 9 See Wolfgang Sachs, Climate Change and Human Rights, 106 PONTIFICAL ACAD. OF Sci. 349 (2006).
  - <sup>10</sup> See infra text accompanying notes 98–102 (discussing biofuels).
- 11 See generally Maldives Submission, supra note 2; Knox, supra note 2; McInerney-Lankford, supra note 2; John H. Knox, Linking Human Rights and Climate Change at the United Nations, 33 HARV. ENVIL. L. REV. 477 (2009).
- 12 See, e.g., Inuit Petition, supra note 8; Maldives Submission, supra note 2; see Amy Sinden, An Emerging Human Right to Security From Climate Change: The Case Against Gas Flaring in Nigeria, in Adjudicating Climate Change: State, National, and International Approaches 173 (William C.G. Burns & Hari M. Osofsky eds., 2009). But see Eric A. Posner, Climate Change and International Human Rights Litigation: A

people of Alaska filed a human rights-based claim to the Inter-American Commission on Human Rights, alleging that climate change was affecting their way of life. Others, such as small island states, have invoked human rights discourse in the U.N. human rights system to highlight the connections between climate change and violations of fundamental economic, social, and cultural rights. Part I of this Article describes these and other processes that have explicitly tried to link human rights to climate change.

That climate change is related to a variety of human rights by itself begs the more important question of: so what? What are the implications of using a rights-based approach to addressing climate To be sure, most of the international climate change negotiations have focused on establishing a global policy approach that will lead to a "safe" level of greenhouse gas concentrations at a low The policies and approaches promoted through the United cost. Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol to the UNFCCC are designed not to vindicate the rights of those affected by climate change, but rather to manage the problem through a series of complex policy prescriptions, most notably the carbon market created by the Kyoto Protocol. This technocratic response to climate change is consistent with the general approach to managing complex environmental problems through compromise, cost-benefit analysis, and risk management—as opposed to a system based on legal liability, compensation for loss, or the protection of fundamental rights.<sup>15</sup>

Part II of this Article explores some of the implications of taking such a rights-based approach to climate change, recognizing that the implications extend well beyond issues of legal responsibility to the impact of including new voices, institutions, and expertise in the climate debate. Even if legal remedies for climate change-related human rights prove elusive, a rights-based perspective can inform a

Critical Appraisal, 155 U. PA. L. REV. 1925 (2007) (arguing that human rights litigation would result in poor climate change policy).

<sup>13</sup> See Martin Wagner & Donald M. Goldberg, Center for International Environmental Law [CIEL] & Earthjustice, An Inuit Petition to the Inter-American Commission on Human Rights for Dangerous Impacts of Climate Change (2004), http://www.ciel.org/Publications/COP10 Handout EJCIEL.pdf.

<sup>14</sup> See Knox, supra note 2; MALE' DECLARATION ON THE HUMAN DIMENSION OF GLOBAL CLIMATE CHANGE (2007), http://www.manystrong voices.org/\_res/site/file/Background%20docs/Male\_Declaration\_Nov07.pdf [hereinafter MALE' DECLARATION]; Maldives Submission, supra note 2.

<sup>&</sup>lt;sup>15</sup> See, e.g., HUMAN RIGHTS APPROACHES TO ENVIRONMENTAL PROTECTION (Alan E. Boyle & Michael R. Anderson eds., 1996).

re-prioritization of policy responses to climate change away from one focused solely on carbon accounting and toward one that considers more fully principles of equity, fairness, and the impact on the most vulnerable.

#### I LINKING HUMAN RIGHTS TO CLIMATE CHANGE

A growing number of human rights-based strategies have emerged with respect to climate change. Many of these have been led by nongovernmental organizations (NGOs) representing communities or trying more generally to achieve policy coherence between the twin goals of promoting human rights and reducing the impacts of climate change. The Center for International Environmental Law (CIEL), for example, has published a series of human rights and climate change case studies and has supported both the Inuit in bringing their claim to the Inter-American Commission on Human Rights and the Maldives in filing their submission to the Office of the High Commissioner for Human Rights (OHCHR) on the change.16 rights climate relationship between human and International organizations have also highlighted the human rights implications of climate change. The United Nations Development Programme (UNDP), for example, highlighted the impact of climate change on development and associated human rights.<sup>17</sup> The following sections focus on two efforts that have perhaps garnered the most attention: the Inuit petition before the Inter-American Commission and the small island states' efforts in the U.N. Council on Human Rights.

#### A. The Inuit Petition to the Inter-American Commission

In 2005, the unique dependence of the Inuit people on the Arctic environment led them to submit a petition to the Inter-American Commission on Human Rights to highlight the impact of global

<sup>16</sup> See CIEL, http://www.ciel.org/Climate/programclimate.html (describing CIEL's climate change program); CIEL, http://www.ciel.org/Climate/Climate\_Impacts.html (providing CIEL case studies on the human rights impacts of climate change); see also World Wildlife Fund, http://www.panda.org/about\_our\_earth/aboutcc/problems/people\_at\_risk/personal\_stories/witness\_stories (collecting individual studies of how culture change is affecting the lives of rural farmers and others).

<sup>17</sup> See U.N. Development Programme [UNDP], Human Development Report 2007/2008: Fighting Climate Change: Human Solidarity in a Divided World (2008), available at http://hdr.undp.org/en/media/HDR 20072008 EN Complete.pdf.

warming on their culture, livelihoods, and survival.<sup>18</sup> In an innovative effort to raise climate concerns in a specific human rights context, the Inuit petition charged the United States with failing to take sufficient steps to avoid climate change impacts on the Arctic.<sup>19</sup> The general thrust of the Inuit's claim is set out in the following excerpt from the petition:

The impacts of climate change, caused by acts and omissions by the United States, violate the Inuit's fundamental human rights protected by the American Declaration of the Rights and Duties of Man and other international instruments. These include their rights to the benefits of culture, to property, to the preservation of health, life, physical integrity, security, and a means of subsistence, and to residence, movement, and inviolability of the home.

Because Inuit culture is inseparable from the condition of their physical surroundings, the widespread environmental upheaval resulting from climate change violates the Inuit's right to practice and enjoy the benefits of their culture. The subsistence culture central to Inuit cultural identity has been damaged by climate change, and may cease to exist if action is not taken by the United States in concert with the community of nations.<sup>20</sup>

The petitioners clearly sought to use their human rights claims to build political will to address the impacts they faced from climate change. The requested relief included requests for an investigation, hearing, and report declaring the United States responsible for human rights violations and recommending, among other things, that the United States adopt mandatory measures to limit its emissions of greenhouse gases, to consider the impacts of U.S. greenhouse gas emissions on the Arctic before approving all major government actions, and to implement plans to protect the Inuit culture and provide resources and assistance in adapting to climate change. 22

The Inter-American Commission ultimately decided not to pursue the Inuit Petition as a contested case, and dismissed it for failing to demonstrate a violation of the rights protected in the American Declaration.<sup>23</sup> Instead, the Inter-American Commission on Human

<sup>18</sup> See Inuit Petition, supra note 8.

<sup>19</sup> Id. at 76.

<sup>20</sup> Id. at 5.

<sup>&</sup>lt;sup>21</sup> Donald M. Goldberg & Martin Wagner, CIEL & Earthjustice, *Petitioning for Adverse Impacts of Global Warming in the Inter-American Human Rights System* (2002), http://www.ciel.org/Publications/Petitioning\_GlobalWarming\_IAHR.pdf.

<sup>22</sup> Inuit Petition, supra note 8, at 18; see also Wagner & Goldberg, supra note 13, at 4.

<sup>&</sup>lt;sup>23</sup> Letter from Ariel E. Dulitzky, Assistant Executive Sec'y, Inter-Am. Comm'n on Human Rights, to Paul Crowley, Legal Representative (Nov. 16, 2006) (on file with author).

Rights invited the petitioners to testify at an information hearing on March 1, 2007, to investigate the relationship between global warming and human rights.<sup>24</sup> Although not successful legally, the Inuit petition brought substantial international attention to the plight of the Inuit and undoubtedly enhanced their influence and visibility in international climate negotiations.

At least one native village has taken a different legal approach, pursuing compensation for the costs of relocating its village in U.S. Federal Court. On February 26, 2008, the Native Village of Kivalina filed a suit based on theories of public nuisance, private nuisance, and conspiracy to commit a tortious wrong. Although not explicitly couched in terms of international human rights, the injuries to the village's way of life do raise rights-based issues not unlike those raised in the Inter-American Commission.

#### B. The Small Island States

As part of their effort to raise awareness of the long-term implications of climate change for their continued existence, small island states have also begun to frame their concerns in terms of human rights. In November 2007, for example, in anticipation of the Bali Conference of the Parties under the UNFCCC, the Association of Small Island Developing States issued a declaration requesting that the OHCHR "conduct a detailed study into the effects of climate change on the full enjoyment of human rights, which includes relevant conclusions and recommendations thereon."

Whether because of the call made by the small island states or otherwise, the U.N. Human Rights Council requested the OHCHR conduct "a detailed analytical study on the relationship between climate change and human rights, to be submitted to the Council prior to its

<sup>&</sup>lt;sup>24</sup> CIEL, Global Warming and Human Rights Gets Hearing on the World Stage, http://www.ciel.org/Climate/IACHR\_Inuit\_5Mar07.html (providing links to testimony) (last visited Jan. 7, 2010); Audio tape: Human Rights and Global Warming, Public Hearings of the 127 Period of Sessions, held by the Inter-American Commission on Human Rights (Mar. 1, 2007), http://www.cidh.org/audiencias/select.aspx (follow "127 Period of Sessions (February 26–March 9, 2007)" hyperlink, then select "Thursday, March 01, 2007").

<sup>&</sup>lt;sup>25</sup> See Complaint, Native Village of Kivalina v. ExxonMobil Corp., No. 4:08cv1138, 2008 WL 594713 (N.D. Cal. Feb. 26, 2008) [hereinafter Kivalina Complaint]. The case has been dismissed by the District Court and is on appeal to the Ninth Circuit. See Native Village of Kivalina v. ExxonMobil Corp., No. C08-1138 SBA, 2009 WL 3326113 (N.D. Cal. Sept. 30, 2009).

<sup>26</sup> MALE' DECLARATION, supra note 14, at 3.

tenth session."<sup>27</sup> The OHCHR report, issued in January 2009, highlighted the implications of climate change for the full enjoyment of several specific human rights, including the rights to life, water, food, housing, health, and self-determination,<sup>28</sup> and on vulnerable groups such as women, children, and indigenous peoples.<sup>29</sup> The Human Rights Council in its 2009 meeting subsequently affirmed the general findings of the OHCHR report and continued to outline future work in the area for the Council, the OHCHR, and the Special Rapporteur on Housing.<sup>30</sup> Importantly, the Human Rights Council showed its intention to keep U.N. human rights institutions engaged in the climate change debate, forcing dialogue that can potentially enhance policy coordination between the twin goals of climate change prevention and human rights protection.<sup>31</sup>

## II IMPLICATIONS OF THE HUMAN RIGHTS PERSPECTIVE

The traditional approach to complex environmental issues is to establish a regulatory regime and the institutional capacity to manage the environmental problems over time. Particularly with respect to pollution issues, environmental regulators generally reach compromises between the environmental and public health costs of the pollution on the one hand with the economic costs of abating the pollution on the other. The resulting environmental policy only rarely forbids all pollution, but instead looks for levels that do not cause an unreasonable risk to public health or the environment. The black-and-white nature of human rights does not fit well into this management-oriented, compromise-laden approach.<sup>32</sup>

<sup>27</sup> UNHRC Res. 7/23, ¶ 1, U.N. Doc. A/HRC/RES/7/23 (Mar. 28, 2008). For a thorough treatment of the U.N. Human Rights Council's approach to climate change, see Marc Limon, *Human Rights and Climate Change: Constructing a Case for Political Action*, 33 HARV. ENVIL. L. REV. 439 (2009).

<sup>28</sup> OHCHR Report, supra note 3, ¶¶ 20–41.

<sup>29</sup> Id. ¶¶ 45–54.

<sup>&</sup>lt;sup>30</sup> UNHRC, Promotion and Protection of All Human Rights, Civil, Political, Economic, Social and Cultural Rights, Including the Right to Development, U.N. Doc. A/HRC/10/L.30 (Mar. 20, 2009) [hereinafter 2009 Human Rights Council Resolution on Climate Change]; see also Limon, supra note 27, at 447–48.

<sup>31</sup> See OHCHR Report, supra note 3; see also supra text accompanying notes 3, 5–8.

<sup>32</sup> See generally Michael R. Anderson, *Human Rights Approaches to Environmental Protection: An Overview*, in Human Rights Approaches to Environmental Protection, *supra* note 15, at 21–23 (discussing the human rights approach).

To date, the international approach to climate change has largely mirrored the management approach taken to other complex environmental problems. The overall approach of the climate regime is that scientists will identify safe levels of atmospheric greenhouse gases concentrations (and by extension, safe levels of greenhouse gas emissions), and the climate regime will align countries to reach those levels through a variety of management tools, including most notably the Kvoto Protocol's cap-and-trade system.<sup>33</sup> This is reflected in the ultimate objective of the UNFCCC, which is to achieve "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate The objective links the determination of what is "dangerous" to goals of ecosystem conservation, food security, and sustainable development, but it does not suggest that the climate regime will be concerned with harms to individual rights or with seeking compensation or demonstrating liability.<sup>35</sup> These latter goals would be more commensurate with a system that was concerned with vindicating or promoting individual rights and interests.

The management approach is also reflected in the growth and focus of the climate change secretariat, located in Bonn, Germany. The climate change secretariat is charged with supporting the annual meetings of the Conference of the Parties (COP) and otherwise implementing the UNFCCC and the Kyoto Protocol.<sup>36</sup> The climate secretariat is an impressive collection of technical experts, scientists, and policy analysts who have formed a significant bureaucracy for managing the carbon market and other aspects of international climate

<sup>&</sup>lt;sup>33</sup> See Kyoto Protocol to the United Nations Framework Convention on Climate Change art. 6, Dec. 11, 1997, 2303 U.N.T.S. 148 [hereinafter Kyoto Protocol] (describing the basic outline of the cap-and-trade system).

<sup>34</sup> United Nations Framework Convention on Climate Change [UNFCCC] art. 2, May 9, 1992, 1771 U.N.T.S. 107 [hereinafter Convention on Climate Change]. Article 2 states:

The ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.

<sup>35</sup> Id.

<sup>&</sup>lt;sup>36</sup> UNFCCC, Contact Us, http://unfccc.int (follow "Contact Us" hyperlink); *see also* Convention on Climate Change, *supra* note 34, art. 8 (describing the secretariat's functions).

policy.<sup>37</sup> The primary role involves data collection and exchange among the parties regarding greenhouse gas emissions, mitigation efforts, impacts, and the overall effectiveness of the regime.<sup>38</sup> The net result is that the climate regime is particularly good at "carbon accounting," but less focused on issues of liability, compensation, or the vindication of individual rights.

In the end, an increased focus on the linkage between human rights climate change cannot be expected to replace, or even fundamentally change, the technocratic approach to managing climate change risks under the climate change regime. Nor should it, but a human rights perspective can make vital contributions in expanding the diversity of perspectives that are heard in the climate debate and as a result the range of policies and approaches that are ultimately adopted. First, human rights can provide a basis for apportioning responsibility and liability as between those who have caused climate change and those who will suffer from it most.<sup>39</sup> Second, framing climate change impacts through human rights highlights the moral dimension of climate change in a way that can build political will to respond more effectively. 40 Third, the consideration of human rights means a different set of institutional actors and voices will be brought into the climate change debate that can improve decision making.<sup>41</sup> Fourth, attention to human rights can help to screen certain types of mitigation responses to climate change.<sup>42</sup> Fifth, human rights can provide a way to prioritize how the global community allocates scarce resources to adapt to climate change.<sup>43</sup>

#### A. Legal Liability for Human Rights Violations

In contrast to the environmental field's focus on managing complexities through compromise, the human rights field's focus is on protecting and promoting human rights through ensuring accountability, responsibility, and liability. Thus, the process of

<sup>&</sup>lt;sup>37</sup> For a diagram of the secretariat's structure, see UNFCCC, Secretariat Structure, http://unfccc.int/secretariat/programmes/items/2098.php.

<sup>&</sup>lt;sup>38</sup> See generally Convention on Climate Change, *supra* note 34, arts. 7–8 (describing the secretariat's functions); Kyoto Protocol, *supra* note 33, arts. 13–14, (enumerating the roles of the Conference of the Parties and the Secretariat).

<sup>39</sup> See infra text accompanying notes 44–57.

<sup>40</sup> See infra text accompanying notes 58–70.

<sup>41</sup> See infra text accompanying notes 71–96.

<sup>42</sup> See infra text accompanying notes 97–110.

<sup>43</sup> See infra text accompanying notes 111–18.

identifying and documenting potential human rights violations brought about by climate change brings with it the implicit possibility of a legal remedy against those States that are responsible for climate change. Such was the position taken by the Inuit in their petition to the Inter-American Commission on Human Rights<sup>44</sup> and in the submission by the Maldives to the U.N. Human Rights Commission.<sup>45</sup> In short, those whose rights are being violated will argue for a legal remedy.

In the context of climate change, to secure a robust legal remedy for human rights violations may prove to be difficult. Despite the attention brought on the Inuit's plight by their petition, the Inter-American Commission deflected the petition's legal claims, resorting instead to a more politically acceptable hearing on the linkages between climate change and human rights. Nor have island state residents yet pressed for, or received, any legal remedies for the impending impacts on their lives from climate change. Some of the obstacles to bringing a human rights claim in the climate context were also noted by the OHCHR Report:

While climate change has obvious implications for the enjoyment of human rights, it is less obvious whether, and to what extent, such effects can be qualified as human rights violations in a strict legal sense. Qualifying the effects of climate change as human rights violations poses a series of difficulties. First, it is virtually impossible to disentangle the complex causal relationships linking historical greenhouse gas emissions of a particular country with a specific climate change-related effect . . . . Second, global warming is often one of several contributing factors to climate change-related effects, such as hurricanes, environmental degradation and water stress. . . . Third, adverse effects of global warming are often projections about future impacts, whereas human rights violations are normally established after the harm has occurred. <sup>48</sup>

As the OHCHR points out, attributing particular impacts on human rights to climate change is difficult, as is determining the overall contribution of each country or of private industry.<sup>49</sup> As a result, even

<sup>44</sup> Inuit Petition, supra note 8.

<sup>&</sup>lt;sup>45</sup> Maldives Submission, *supra* note 2.

<sup>46</sup> See, e.g., Posner, supra note 12.

<sup>47</sup> CIEL, supra note 24.

<sup>&</sup>lt;sup>48</sup> OHCHR Report, supra note 3, ¶ 70 (footnotes omitted); see Posner, supra note 12, at 1925 ("[T]here is little reason to believe that international human rights litigation would lead to a desirable outcome.").

<sup>49</sup> OHCHR Report, supra note 3, ¶ 70.

though climate change will affect and have implications for the satisfaction and fulfillment of various human rights, those countries contributing most to climate change may not necessarily be deemed to violate the human rights of those who suffer from climate change.

On the other hand, the scientific understanding of climate change and its impacts is improving. The ability to document links between global warming, particular climate change-related events, and human rights impacts will improve over time, and so will the potential for successful rights-based litigation, particularly at the national level.<sup>50</sup>

Thus, regardless of whether climate change-related human rights violations ever form the basis for an international human rights claim, the legal dimension of human rights may still be important at the national level. The Inupiat village of Kivalina's claim against major fossil fuel companies is one rights-based example. Although it is too early to know whether that litigation will be successful, rights-based climate-related litigation has been successful in other countries. For example, the Federal High court of Nigeria has upheld citizens' claims that the practice of flaring natural gas released during oil extraction harmed their individual rights to life and dignity. Moreover, success at the national level in gaining compensation for climate change victims could build pressure for an international

<sup>50</sup> See generally Myles Allen et al., Scientific Challenges in the Attribution of Harm to Human Influence on Climate, 155 U. PA. L. REV. 1353 (2007) (discussing difficulties in establishing direct links between human influences and harm); Myles Allen, Liability for Climate Change, 421 NATURE 891–92 (2003) (discussing the possibility of suing for climate damage); Peter A. Stott et al., Human Contribution to the European Heatwave of 2003, 432 NATURE 610 (2004) (discussing the link between human activities and the European 2007 heatwave, the hottest since AD 1500); Simone Bastianoni et al., The Problem of Assigning Responsibility for Greenhouse Gas Emissions, 49 ECOLOGICAL ECON. 253 (2004) (discussing difficulties in assigning responsibility for greenhouse gas emissions).

<sup>&</sup>lt;sup>51</sup> Some victims of Hurricane Katrina are also pursuing compensation for damages they claim were exacerbated by climate change. *See* Comer v. Murphy Oil USA, No. O7-60756, 2009 WL 3321493, at \*2 (5th Cir. Oct. 16, 2009) (reversing the District Court's dismissal of the complaint).

<sup>&</sup>lt;sup>52</sup> Native Village of Kivalina v. ExxonMobil Corp., No. C08-1138 SBA, 2009 WL 3326113 (N.D. Cal. Sept. 30, 2009).

<sup>53</sup> Gbemre v. Shell Petroleum Dev. Co., No. FHC/B/CS/53/05, (F.H.C.N. Nov. 14, 2005) (Nigeria), available at http://www.climatelaw.org/cases/case-documents/nigeria/ni-shell-nov05-judgment.pdf. Although the plaintiffs raised climate change-related impacts, the Court's decision was ultimately not based solely on climate change impacts. See Sinden, supra note 12, at 173 (analyzing the relationship of the case to climate change and human rights). Press Release, Climate Justice Programme, Court Orders Nigerian Gas Flaring to Stop (Nov. 14, 2005), http://climatelaw.org/media/2005Nov14 (announcing the Federal High Court's judgment).

liability regime patterned generally after existing liability regimes covering injuries from hazardous wastes,<sup>54</sup> oil spills,<sup>55</sup> or nuclear accidents or wastes.<sup>56</sup>

Focusing on the litigation aspects of human rights may also be too limiting in understanding the legal dimensions of climate-related human rights violations. As the OHCHR concluded, even if climate change-related harm cannot be attributed to acts or omissions of specific States, "addressing that harm remains a critical human rights concern and obligation under international law. Hence, legal protection remains relevant as a safeguard against climate change-related risks and infringements of human rights resulting from policies and measures taken at the national level to address climate change." States are not relieved from their obligations to protect and promote human rights because a rights violation cannot be easily vindicated in a legal proceeding.

#### B. The Moral Authority of Human Rights

Even if a legal remedy may not be readily available, a rights-based approach lends moral authority and with it rhetorical power to the victims of climate change. This moral authority can be an effective counterweight to the technocratic approaches that otherwise dominate the climate change debate. As Michael Anderson has suggested, "a human rights approach is a strong claim, a claim to an absolute entitlement theoretically immune to the lobbying and trade-offs which characterize bureaucratic decision-making. Its power lies in its ability to trump individual greed and short-term thinking."

<sup>54</sup> Basel Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and Their Disposal, Dec. 10, 1999, available at http://www.basel.int/meetings/cop/cop5/docs/prot-e.pdf (not yet in force).

<sup>55</sup> International Convention on Civil Liability for Oil Pollution Damage, Nov. 29, 1969, 973 U.N.T.S. 265.

<sup>&</sup>lt;sup>56</sup> Paris Convention on Third Party Liability in the Field of Nuclear Energy, July 29, 1960, 956 U.N.T.S. 251; Vienna Convention on Civil Liability for Nuclear Damage, May 21, 1963, 1063 U.N.T.S. 266; Brussels Convention Relating to Civil Liability in the Field of Maritime Carriage of Nuclear Material, Dec. 17, 1971, 974 U.N.T.S. 255.

<sup>57</sup> OHCHR Report, supra note 3, ¶ 96.

<sup>&</sup>lt;sup>58</sup> Anderson, *supra* note 32, at 21. Anderson notes that "[o]ften, the real value of a human right is that it is available as a moral trump card precisely when legal arrangements fail." *Id.* at 12–13. Furthermore.

A second advantage is that the procedural dimensions of an environmental right can provide access to justice in a way that bureaucratic regulation, or tort law, simply cannot. A robust environmental right can mobilize redress where other

As an example, the United Nations Development Programme (UNDP) in its 2007 Human Development Report Summary described climate change in this way:

[Climate change] is a human tragedy in the making. Allowing that tragedy to evolve would be a political failure that merits the description of an "outrage to the conscience of mankind". It would represent a systematic violation of the human rights of the world's poor and future generations and a step back from universal values. . . . The real choice facing political leaders and people today is between universal human values, on the one side, and participating in the widespread and systematic violation of human rights on the other. <sup>59</sup>

Describing climate change in such terms brings into focus the human implications of future climate change impacts. The numbers support the UNDP's invocation of human rights. An estimated 262 million people were affected by climate-related disasters annually from 2000 to 2004, over ninety-eight percent of them in the developing world. Not all of these climate-related disasters can be attributed to climate change, but in the future nearly all types of climate-related disasters (floods, hurricanes, droughts) are expected to be exacerbated in many regions of the world by climate change.

The numbers support the view that climate change may have systemic human rights implications, but perhaps more importantly a human rights perspective forces us to examine climate change at the individual victim's level. Our focus is placed on those who suffer today from climate change as opposed to some abstract discussion of parts per million or millimeters of sea level rise. Delay is less likely when negotiators are confronted directly by the faces and voices of those who are suffering immediately. The Inupiat village of Kivalina's description of their homes subsiding into the Arctic

remedies have failed. . . . Thirdly, a human rights approach may stimulate concomitant political activism on environmental issues. Concerned citizens and NGOs are more likely to rally around a general statement of right than a highly technical, bureaucratic regulation expressed in legalese.

Id. at 21-22.

<sup>&</sup>lt;sup>59</sup> UNDP, *Human Development Report 2007/2008: Summary*, at 10 (2008), *available at* http://hdr.undp.org/en/media/HDR\_20072008\_Summary\_English.pdf [hereinafter *UNDP Summary*].

<sup>60</sup> Id. at 16.

<sup>&</sup>lt;sup>61</sup> See generally IPCC 2007: The Physical Science Basis, *supra* note 1 (describing drivers of climate change, the process of climate change, and the projected future climate change).

Ocean<sup>62</sup> is a more vivid and urgent statement about sea level rise than is the IPCC prediction that sea levels will rise 0.59 meters by the end of the century.<sup>63</sup> In this way, human rights narratives can build the political will of the negotiators by taking them out of their technocratic comfort zone and forcing them to confront the realities of a changing planet.

#### 1. Rights to the Atmosphere

A human rights-based perspective can also provide a moral frame for one of the most fundamental questions facing the international climate change regime—how to allocate the rights to pollute the atmosphere. The basic approach of the UNFCCC and the Kyoto Protocol is that science will inform policymakers of the appropriate level of greenhouse gas emissions that can be allowed in order to protect us from a high risk of climate catastrophe.<sup>64</sup> Once this global cap on greenhouse gas emissions is agreed, the further question remains how to allocate the global cap on emissions among the various countries of the world.

From a rights-based perspective, only one answer is defensible—the atmosphere must be allocated on an equitable per capita basis.<sup>65</sup> Every individual deserves an equal right to share in the benefits of a global commons resource, such as the atmosphere and the global climate system. As put by Professor Sachs:

<sup>62</sup> See Kivalina Complaint, supra note 25.

<sup>63</sup> See IPCC 2007: The Physical Science Basis, supra note 1, at 13. Data released since the IPCC report suggests that the rate of sea level rise is more than previously believed and predicts levels of up to 1.4 meters by the end of the century. See Susan Solomon et al., A Closer Look at the IPCC Report, 319 SCIENCE 409–10 (Jan. 25, 2008); see generally David B. Hunter, The Implications of Climate Change Litigation: Litigation for International Environmental Law-Making, in ADJUDICATING CLIMATE CHANGE: STATE, NATIONAL, AND INTERNATIONAL APPROACHES, supra note 12, at 357 (discussing implications of a litigation-based approach to climate change).

<sup>64</sup> Although this is hotly debated, most climate scientists and policymakers believe that limiting human-caused global warming to 2°C or less is necessary to keep the risk of catastrophic climate change low. See, e.g., IPCC 2007: The Physical Science Basis, supra note 1, at 12 Most policymakers act on the assumption that stabilizing atmospheric greenhouse gas concentrations at a level of 450 parts per million will limit the increase to 2°C. See, e.g., MALE' DECLARATION, supra note 14, at 2. For a general discussion of the relationship between greenhouse gas emissions, concentrations, and temperature rise, see WOLD, HUNTER & POWERS, supra note 2, at 44–47.

<sup>65</sup> Sachs, supra note 9, at 349.

The atmosphere . . . belongs to nobody in particular and to everybody equally; in other words, the atmosphere is a global common good. . . .

. . . .

... This calls for a framework that respects the principle of an equal per capita right to the Earth's atmosphere. Most other allocation schemes would repeat a colonial style approach, granting disproportionate shares to the North. If the use of a global common good has to be restrained through collective rules, it would violate the principle of equity to design these rules to the advantage of some and the disadvantage of many. The equal right of all world citizens to the shared atmosphere is therefore the cornerstone of any viable climate regime. <sup>66</sup>

In short, climate science will inform us as to the overall level of global emissions that are possible without risking global climate chaos, but climate science cannot tell us how to allocate the right to pollute. That is a question of ethics, fairness, and, of course, politics. By emphasizing the relationship of individual rights to the global atmosphere, the human rights approach permits of no other formula for allocation except one based on equality. Although other systems exist for allocating rights to pollute under the cap, including, for example, allocations based on historical emissions or on efficiency (i.e., the amount of pollution per dollar of output), a rights-based approach embraces each individual as an equal rights-holder in the atmosphere (or in a benign climate system).

This presents a tremendous challenge to the climate negotiators. The position is consistent with the overall framework agreed to in the UNFCCC, particularly the principles of equity<sup>67</sup> and of common but differentiated responsibilities<sup>68</sup> that underlie the overall climate regime. These principles are premised on the idea that developed countries would accept binding commitments first, and take real steps to address climate change *before* developing countries would be asked to make similar commitments. Such an allocation roughly means that U.S. emissions must decline dramatically over time while the emissions of such countries like China and India must be allowed to grow. But this is easier said by academics than achieved by

<sup>66</sup> Id.

<sup>67</sup> Convention on Climate Change, *supra* note 34, art. 3, princ. 1 (providing that "[t]he Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity . . . .").

<sup>&</sup>lt;sup>68</sup> See id. arts. 3, 4 (including the recognition that the Parties should participate in climate change efforts in accordance with, and taking account of, "their common but differentiated responsibilities and respective capabilities").

politicians. The allocations under the Kyoto Protocol, for example, were not consistent with any systematic or principled approach; the Kyoto Protocol's caps can only be understood as the result of political compromise and the give-and-take of negotiations. No overarching principle explains why, for example, Australia was allowed to increase their emissions by eight percent, while most European countries had to decrease emissions eight percent. Nothing emerging from the post-Kyoto negotiations yet suggests that anything will be different in the post-Kyoto regime.

As with the Kyoto negotiations, a rights-based approach is unlikely to be so legally robust that it will constrain the countries in how they ultimately negotiate the allocation of rights to pollute the atmosphere. Nonetheless, the rights-based approach provides a clear moral and ethical counterweight to arguments based primarily on economic efficiency or political expedience. This strengthens the hands of developing countries and others who have historically contributed less to climate change (i.e., used less of the atmosphere) and it builds pressure on the developed countries to reduce further their emissions and push for convergence over time to an equal per capita level of emissions. In the end, human rights arguments should help negotiators toward a more equitable solution than what would result in the absence of such arguments.

#### C. Bringing New Voices to the Climate Debate

By traditional standards of international law, climate change negotiations have always been open and transparent. Literally thousands of representatives from hundreds of different interest groups and stakeholders regularly attend the global climate negotiations. The Bali Conference of the Parties saw 10,000

<sup>&</sup>lt;sup>69</sup> For a discussion of the Kyoto Protocol and the negotiations leading up to it, see MICHAEL GRUBB ET AL., THE KYOTO PROTOCOL: A GUIDE AND ASSESSMENT (1999); Clare Breidenich et al., *The Kyoto Protocol to the United Nations Framework Convention on Climate Change*, 92 AM. J. INT'L L. 315 (1998).

<sup>&</sup>lt;sup>70</sup> See Kyoto Protocol, supra note 33, Annex B.

<sup>71</sup> Public participation and access to information are considered fundamental principles in international environmental law, and most environmental treaty regimes have developed robust methods for including multiple stakeholders in the process of negotiation—at least when compared to other areas of international law. *See generally* United Nations Conference on Environment and Development, Rio de Janiero, Brazil, June 3–14, 1992, *Rio Declaration on Environment and Development*, princ. 10, U.N. Doc. A/CONF.151/26 (1992) [hereinafter *Rio Declaration*] ("Environmental issues are best handled with participation of all concerned citizens, at the relevant level.").

participants from 180 countries,<sup>72</sup> and the Copenhagen talks held in December 2009 hosted nearly four times that many. Civil society participants in these negotiations have significant access to the plenary and to some of the working groups, and many have developed significant contacts and methods for monitoring and influencing the negotiations.<sup>73</sup> A wide range of "side-events" parallel the negotiations, providing non-State actors with opportunities to promote their specific issues.

Taking advantage of these different opportunities, human rightsoriented groups have increasingly become active participants in the climate change negotiations. The value added of a human rights perspective is not that it opened the climate negotiations up, because climate negotiations have long been public affairs. Rather, human rights provide a policy framework that can amplify the voices of certain stakeholders in the climate talks—namely those whose rights are threatened.

Representatives of human rights organizations, communities, and other vulnerable groups are experts in human rights and thus to the extent human rights are viewed as relevant to climate change, these groups have immediate legitimacy and potential Their voices have a chance to rise above what can otherwise be a multi-stakeholder cacophony at huge climate meetings and challenge the perspective of the carbon accountants—those people and institutions that are experts in measuring atmospheric greenhouse gas concentrations, estimating the amount of carbon sequestered from forests, or measuring changes in emissions over time. The carbon accountants are necessary and good at what they do, but their voice carries little of the urgency reflected in the voices of the small island states, indigenous peoples, and other vulnerable groups that remind us of why we need a climate regime in the first place. In short, human rights advocates put "people, their prosperity, homes, survival and rights at the centre of the climate change debate.",74

The Article next looks at the calls for greater recognition of vulnerable groups in the climate regime, and then turns to the way

<sup>72</sup> UNFCCC, The United Nations Climate Change Conference in Bali, http://unfccc.int/meetings/cop\_13/items/4049.php (last visited Jan. 20, 2010).

<sup>73</sup> See Kal Raustiala & Natalie L. Bridgeman, Nonstate Actors in the Global Climate Regime, in INTERNATIONAL RELATIONS OF GLOBAL CLIMATE CHANGE (Urs Luterbacher & Detlef F. Sprinz eds., 2d ed. forthcoming).

<sup>74</sup> MALE' DECLARATION, supra note 14, at 3.

formal human rights institutions are being integrated into climate governance.

#### 1. Vulnerable and Disadvantaged Groups

International environmental law has long been sensitive to the particular aspirations, concerns, and perspectives of vulnerable groups, such as indigenous peoples<sup>75</sup> and women.<sup>76</sup> International treaty regimes for fisheries management,<sup>77</sup> the conservation of biological diversity,<sup>78</sup> and the reduction of persistent organic pollutants<sup>79</sup> all make specific reference to the disparate impacts and special situations of vulnerable groups. No such reference is present in either the UNFCCC or the Kyoto Protocol, which take a more

75 See Rio Declaration, supra note 71, princ. 22 ("Indigenous people and their communities and other local communities have a vital role in environmental management and development because of their knowledge and traditional practices. States should recognize and duly support their identity, culture and interests and enable their effective participation in the achievement of sustainable development."); World Summit on Sustainable Development, Aug. 26–Sept. 4, 2002, Johannesburg, S. Afr., Johannesburg Declaration on Sustainable Development, ¶ 25, U.N. Doc. A/CONF.199/L.6/Rev.2 [hereinafter Johannesburg Declaration] ("We reaffirm the vital role of the indigenous peoples in sustainable development.").

76 See Rio Declaration, supra note 71, princ. 20 ("Women have a vital role in environmental management and development. Their full participation is therefore essential to achieve sustainable development."); Johannesburg Declaration, supra note 75, ¶ 20 ("We are committed to ensuring that women's empowerment, emancipation and gender equality are integrated in all the activities encompassed within Agenda 21, the Millennium development goals and the Plan of Implementation of the Summit." (footnote omitted)).

77 Agreement for the Implementation of the Provisions of the United Nations Convention of the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, art. 24.2(b), U.N. Doc. A/CONF. 164/37 (Sept. 8, 1995) (emphasizing "the need to avoid adverse impacts on, and ensure access to fisheries by, subsistence, small-scale and artisanal fishers and women fishworkers, as well as indigenous people . . . . ").

78 Convention on Biological Diversity, Dec. 29, 1993, 1760 U.N.T.S. 79, pmbl. ("Recognizing the close and traditional dependence of many indigenous and local communities embodying traditional lifestyles on biological resources . . ." and "Recognizing also the vital role that women play in the conservation and sustainable use of biological diversity and affirming the need for the full participation of women at all levels of policy-making and implementation for biological diversity conservation.").

79 Stockholm Convention on Persistent Organic Pollutants, pmbl., May 17, 2004, U.N. DOC. UNEP/POPS/CONF/4 ("Acknowledging that the Arctic ecosystems and indigenous communities are particularly at risk because of the biomagnification of persistent organic pollutants and that contamination of their traditional foods is a public health issue," and "Aware of the health concerns, especially in developing countries, resulting from local exposure to persistent organic pollutants, in particular impacts upon women and, through them, upon future generations").

State-centered approach in recognizing the particular impacts on vulnerable States, such as small island and low-lying States.<sup>80</sup>

The treaty regime's failure to acknowledge the interests of specific vulnerable, non-State groups has not deterred indigenous peoples, internally displaced refugees, women, and others to press for greater sensitivity and increased participation within the climate regime.

Indigenous leaders have repeatedly called on the UNFCCC to create, among other things, an Ad Hoc Working Group on Indigenous Peoples and Climate Change within the UNFCCC framework. They have also sought to have the COP provide financial support and capacity building for their "full and effective participation," and to "take into account indigenous knowledge systems, culture, social values, spirituality and ecosystems; as well as the full and equal participation of Indigenous Peoples in all aspects and stages of [Climate Impact Assessments]." Despite repeated calls, the UNFCCC has not yet agreed to such a working group and at this point indigenous peoples' organizations are allowed to participate in the climate negotiations on essentially the same terms as any non-State actor.

Women's groups are also becoming more vocal in seeking broader recognition of the disparate gender impacts from climate change and expanded economic opportunities being created through the carbon market and climate-related development assistance. The Women's Environment and Development Organization (WEDO), for example, has called on the UNFCCC to "develop a gender strategy, invest in gender-specific climate change research, and establish a system for

<sup>&</sup>lt;sup>80</sup> See, e.g., Convention on Climate Change, *supra* note 34, pmbl. ("*Recognizing further* that low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change.").

<sup>81</sup> Milan Declaration of the Sixth International Indigenous Peoples Forum on Climate Change, ¶ 6(b), delivered to the Ninth Session of the Conference of the Parties to the UNFCCC, (Nov. 29–30, 2003) [hereinafter Milan Declaration]; see also U.N. Econ. & Soc. Council [ECOSOC], Permanent Forum on Indigenous Issues Report on the Second Session, ¶ 47, U.N. Doc. E/2003/43, E/C.19/2003/22 (May 12–23, 2003).

<sup>82</sup> Milan Declaration, supra note 81, ¶ 6(c).

<sup>83</sup> Id. ¶ 6(i).

<sup>84</sup> For a discussion on gender-based differences in vulnerability and adaptive capacity to climate change, see IPCC, Working Group II, Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change 730 (2007), available at http://www.ipcc-wg2.gov/publications/AR4/index.html (follow "Chapter 17: assessment of adaptation practices, options, constraints and capacity" hyperlink) [hereinafter IPCC 2007: Adaptation and Vulnerability].

the use of gender-sensitive indicators and criteria for governments to use in national reporting to the UNFCCC Secretariat, adaptation planning, or projects under the Clean Development Mechanism (CDM)."85

It is important to note that the demands are not only to be allowed greater participatory rights in the political aspects of the global climate regime, but, just as importantly, to be given equal or preferred access to the economic benefits generated from the climate regime, particularly the carbon market. They seek affirmative steps to ensure that market-based approaches to curb climate change, such as the Clean Development Mechanism, are accessible and provide equitable benefits to traditionally vulnerable groups, including indigenous peoples, resource-dependent communities, and women.

Indigenous peoples argue that no development projects should occur involving their land without their prior informed consent, which among other things implies a negotiated agreement on benefit-sharing from any carbon-based revenues. Indigenous peoples fear that further extending the CDM to support reduced deforestation will just add more international financing and more economic pressure on their forests, exacerbating the loss of autonomy at the local level. In a recent declaration on climate change, indigenous peoples argued that the CDM "must incorporate principles which address transparency, free, prior and informed consent and equitable benefit sharing."

They also reiterated that "[a]ll development projects within indigenous ancestral territories must respect our fundamental rights to lands, territories, self-determination and ensure our right to our free, prior and informed consent."

This is just as true for development

<sup>85</sup> Women's Environment and Development Organization [WEDO] et al., *Declaration on Climate Change and Gender Equality*, prepared for the High-Level Roundtable "How a Changing Climate Impacts Women" (Sept. 2007) [hereinafter *WEDO Declaration*].

<sup>86</sup> The clean development mechanism (CDM) was established as one of the flexibility mechanisms under the Kyoto Protocol. *See* Kyoto Protocol, *supra* note 33, art. 12. The CDM is a project-based mechanism through which an investor (typically from a developed country) purchases emissions credits that result from reduced emissions in a project located in a developing country. The following illustrates how the CDM works: assuming that it is cheaper to convert a coal fired power plant to natural gas in São Paulo than in Paris, a French utility facing requirements to reduce green house gas emissions could invest in the Brazilian project and, in return, the French utility would receive certified emission reduction (CER) credits amounting to the differential between a coal-fired (more emitting) and a gas-fired (less emitting) power plant.

<sup>87</sup> Milan Declaration, supra note 81, ¶ 6(e).

<sup>88</sup> *Id.* ¶ 6(f).

projects aimed at protecting the climate system as it is for more traditional development projects.

Women's groups have sought to ensure that these new markets do not perpetuate or exacerbate the disproportionate access between women and men to natural resources such as water and energy, land titles, credit, or information. They seek a preference from the CDM for projects that, for example, make renewable technologies more available to women to meet their household needs.

Until now, these efforts have been decidedly mixed. The forms of participation for indigenous peoples and women's representatives have not been significantly different than other civil society representatives, nor does the climate regime yet reflect the specific concerns or perspectives from these or other vulnerable groups. Nonetheless, their perspectives are shaping the overall policy debate and in the future may lead to important conditions or priorities being set to respond to their specific needs.

#### 2. Expanding Human Rights Institutional Voices

International environmental governance is replete with examples of fractured policy-making caused by the relatively narrow mandates of different international institutions coupled with underdeveloped mechanisms for cooperation between institutions. The merger of human rights and climate change presents just such a challenge with both the climate regime secretariat and the various human rights institutions having clear mandates in their own areas of operation, but less clarity in how their two areas or institutions should be integrated. 90

The U.N. Human Rights Council has taken the initiative in examining the appropriate institutional approach to integrate the concerns of human rights and climate change. In March, 2009, it "encouraged" the OHCHR "to participate at a senior level" in the Copenhagen climate talks.<sup>91</sup> The Human Rights Council also welcomed:

<sup>89</sup> See WEDO Declaration, supra note 85.

<sup>90</sup> In part to catalyze human rights and climate change institutions to consider innovative ways of cooperation, the Center for International Environmental Law and the Freidrich Ebert Stiftung issued a report suggesting several possible steps. *See* CIEL, HUMAN RIGHTS AND CLIMATE CHANGE: PRACTICAL STEPS FOR IMPLEMENTATION, 6–7 (2009), http://www.fes-globalization.org/geneva/documents/HumanRights/Study\_FES CIEL 2009.pdf [hereinafter CIEL PRACTICAL STEPS].

<sup>91 2009</sup> Human Rights Council Resolution on Climate Change, *supra* note 30, ¶ 5.

[T]he decision of the Special Rapporteur on adequate housing... to prepare and present a thematic report on the potential impact of climate change on the right to adequate housing, and encourage[d] other relevant special procedure mandate-holders to give consideration to the issue of climate change within their respective mandates.

Still an open question is how exactly the Human Rights Council should continue its involvement beyond these initial steps. CIEL has identified several possible approaches for the Human Rights Council to further the integration of human rights and climate change. Science that the OHCHR continue to study the relationship between human rights and climate change, establish a special rapporteur or other procedure to discuss climate change, or the Human Rights Council could specifically cover climate change in its universal quadrennial reviews of the human rights records of each of the U.N. member states.

The climate change institutions could also take proactive steps to address linkages with human rights. CIEL recommended several ways that the UNFCCC secretariat could strengthen its commitment to human rights, ranging from creating a focal point on human rights to negotiating subsequent treaties, procedures, or mechanisms that expand the participation of indigenous peoples in climate-related institutions or otherwise protect human rights. The climate change secretariat has recently created such a focal point on human rights. The climate change secretariat has recently created such a focal point on human rights.

These formal institutional responses could provide the governance architecture for enhanced cooperation and policy integration in the future. Over time, the institutional coordination could be enhanced, perhaps with the long-term goal of providing a forum for hearing and responding to the human rights concerns of climate change victims.

<sup>92</sup> Id. ¶ 3.

<sup>93</sup> CIEL PRACTICAL STEPS, *supra* note 90, at 6–7 (making recommendations for steps the Human Rights Council could take to address the relationship between human rights and climate change).

<sup>94</sup> *Id.*; *see also* OHCHR Universal Periodic Review, http://www.ohchr.org/EN/HRBODIES/UPR/Pages/UPRMain.aspx (describing OHCHR's review process) (last visited Jan. 11, 2010).

<sup>95</sup> CIEL PRACTICAL STEPS, supra note 90, at 7.

<sup>&</sup>lt;sup>96</sup> E-mail from Martin Schoenberg, UNFCCC Secretariat (Jan. 26, 2010) (on file with author) (describing his role as the focal point between the UNFCCC and the OHCHR).

#### D. Shaping Mitigation Responses

Most observers focused on the implications of climate change for human rights appropriately emphasize how climate change itself will undermine the protection and promotion of human rights. Increasingly clear, however, is that the choice of policy responses to climate change may also have implications for the achievement of human rights. Parties to the International Covenant on Economic, Social and Cultural Rights (ICESCR), for example, are obligated to cooperate internationally to promote the progressive realization of economic, social, and cultural rights.<sup>97</sup> Thus, ICESCR parties who are also parties to the climate regime must ensure that steps taken to address climate change do not undermine their ability to promote the progressive realization of economic, social, and cultural rights. In this context, efforts both to avoid climate change (i.e., mitigation) and to lessen the impacts of climate change that do occur (i.e., adaptation) have the potential to raise issues that overlap with human rights. This section addresses the human rights implications of mitigation approaches and the next section addresses adaptation.

Several mitigation options emerging from the negotiation and implementation of the Kyoto Protocol clearly have human rights implications. Moreover, rights-based concerns over these mitigation measures are already having a significant impact on the climate debate, influencing both whether and how these policies will be used to address climate change. Two of these mitigation approaches—biofuels and reducing emissions from deforestation and forest degradation—are explored briefly below.

#### 1. Biofuels

Biofuels, such as ethanol and biodiesel, are frequently promoted as an important alternative to gasoline and other fossil fuels. Biofuels show some promise of reducing greenhouse gas emissions when compared to traditional fossil fuels, depending on which biofuel is

<sup>97</sup> International Covenant on Economic, Social and Cultural Rights, G.A. Res. 2200A (XXI), at Part II, Art. 2, 21 U.N. GAOR, 21st Sess., Supp. No. 16, U.N. Doc A/6316 (Dec. 16, 1966) states:

Each State Party to the present Covenant undertakes to take steps, individually and through international assistance and co-operation, especially economic and technical, to the maximum of its available resources, with a view to achieving progressively the full realization of the rights recognized in the present Covenant by all appropriate means, including particularly the adoption of legislative measures.

used and the method used to produce it. As a result, biofuels are a major component of many national climate change programs. For example, the European Union has set a goal of using ten percent biofuels in all diesel and gasoline. 98

Putting aside concerns over the life-cycle carbon footprint of many biofuels, <sup>99</sup> scaling up biofuel production to a level that could make a significant impact on total greenhouse gas concentrations has significant implications for the availability and price of food. One analysis suggests that approximately one-sixth of the world's croplands would need to be converted to biofuels to scale up production to the levels necessary to combat climate change. <sup>100</sup> As cropland is converted from producing food to energy, however, concern grows that the price of food may increase and the availability of affordable food may decrease.

Just such concerns came to a head in 2008 as the growing demand for biofuels was viewed as at least a contributing factor to soaring world food prices. In 2008, the U.N. Food and Agricultural Organization convened the High Level Conference on World Food and recognized the links between biofuels, soaring food prices, and food security. Similarly, the U.N. Committee on Economic, Social,

<sup>98</sup> Council Directive 2009/28, ¶ 9, 2009 O.J. (L 140) 17 (EC).

<sup>99</sup> Significant controversy and uncertainty exists over the extent to which various biofuels will actually result in net reduced greenhouse gas emissions once the impact of land and crop conversions are taken into account. See, e.g., P.J. Crutzen et al., N2O Release from Agro-Biofuel Production Negates Global Warming Reduction by Replacing Fossil Fuels, 8 ATMOS. CHEM. PHYS. 389, 391 (2008) (nitrous oxide emissions from converting biomass to biofuels would offset climate benefits gained from reducing CO2 emissions); David Pimentel & Marcia Pimentel, Corn and Cellulosic Ethanol Cause Major Problems, 8 ENERGIES 35, 36 (2008) (cellulosic ethanol production requires 170% more energy than corn ethanol); Timothy Searchinger et al., Use of U.S. Croplands for Biofuels Increases Greenhouse Gases Through Emissions from Land Use Change, 319 SCIENCE 1238 (2008) (changing to corn ethanol would double net greenhouse gas emissions); Joseph Fargione et al., Land Clearing and the Biofuel Carbon Debt, 319 SCIENCE 1235 (2008) (land conversion to biomass would initially release 17 to 420 times the amount of greenhouse gas emissions compared to what was saved); Bruce A. Babcock et al., Is Corn Ethanol a Low-Carbon Fuel?, 13 IOWA AGRIC. REV. 1 (2007).

<sup>100</sup> See, e.g., S. Pacala & R. Socolow, Stabilization Wedges: Solving the Climate Problem for the Next 50 Years with Current Technologies, 305 SCIENCE 968, 971 (2004) (arguing that scaling up biofuel production to a sufficient level would require shifting about one-sixth of the world's cropland into high-yield biofuel plantations).

<sup>101</sup> High-Level Conference on World Food Security: The Challenges of Climate Change and Bioenergy, June 3–5, 2008, Rome, Italy, *Declaration on World Food Security*, ¶ 7(f), *available at* http://www.fao.org/foodclimate/conference/declaration/en/ [hereinafter *Declaration on World Food Security*].

and Cultural Rights [CESCR] at least implicitly identified the production of biofuels as a contributor to the 2008 food crisis and a long-term factor undermining efforts to fulfill the human right to adequate food. The CESCR urged States parties:

[T]o address the structural causes [of the food crisis] at the national and international levels, including by:

. . . .

Implementing strategies to combat global climate change that do not negatively affect the right to adequate food and freedom from hunger, but rather promote sustainable agriculture, as required by article 2 of the United Nations Framework Convention on Climate Change.

In this way, the CESCR also highlighted the existing links between the UNFCCC's objective of protecting food security and the related right to adequate food.

Although it is difficult to determine the extent to which rising food prices were due to shifting agricultural production to biofuels, the concerns raised by human rights groups has certainly shifted the debate regarding biofuels. Concerns over food security, when coupled with general concerns over the life-cycle effectiveness of biofuels, likely means that considerably less reliance will be placed on biofuels as a major mitigation option in the future.

## 2. Reduced Emissions from Deforestation and Forest Degradation (REDD)

Another mitigation option that has significant human rights implications is the effort to reduce deforestation in developing countries. Deforestation, forest degradation, and other land-use changes account for approximately seventeen percent of all global greenhouse gas emissions, and much of this occurs in developing

The Committee therefore urges States to take urgent action, including by:

. . . .

Limiting the rapid rise in food prices by, inter alia, encouraging production of local staple food products for local consumption instead of diverting prime arable land suitable for food crops for the production of [biofuels], as well as the use of food crops for the production of agrofuel . . . .

<sup>102</sup> ECOSOC, Comm. on Econ., Soc. and Cultural Rights [CESCR], Statement on the World Food Crisis, ¶ 13, U.N. Doc. E/C.12/2008/1 (May 19, 2008).

countries.<sup>103</sup> A number of developing countries, including Papua New Guinea, Costa Rica, Brazil, and Bolivia have led an effort within the climate negotiations to create a mechanism by which developing countries would be compensated for reducing their rates of deforestation.<sup>104</sup> These efforts led to the formal inclusion of compensation for reduced deforestation as part of the negotiating framework for the post-Kyoto climate negotiations. Among other things, the parties agreed to consider "[p]olicy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries."<sup>105</sup>

Although a focus on how to strengthen forest governance and protect the ecosystem services of forests is laudable, the devil will be in the details. Indigenous peoples and other traditional users of forests remain quite concerned that the climate regime will catalyze further incursions into their territories with limited consultation or participation from forest dwellers. The U.N. Permanent Forum on Indigenous Issues recently recommended that the "renewed political focus on forests" in the UNFCCC:

[B]e used towards securing the rights of indigenous peoples living in forests and rewarding their historical stewardship role and continuing conservation and sustainable use of forests. According to the principle of free, prior and informed consent, indigenous peoples must not be excluded from, and should be centrally involved in and benefit from, deciding forest policies and programmes at all levels that deliver justice and equity and

<sup>103</sup> IPCC, Working Group III, Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, at 27 (2007), http://www.ipcc.ch/publications\_and\_data/publications\_ipcc\_fourth\_assessment\_report\_wg3\_report\_mitigation\_of\_climate\_change.htm (follow "Technical Summary" hyperlink).

<sup>104</sup> See, e.g., UNFCCC, Subsidiary Body for Scientific & Technological Advice, Views on the Range of Topics and Other Relevant Information Relating to Reducing Emissions from Deforestation in Developing Countries, at 11–20, 21–25, U.N. Doc. FCCC/SBSTA/2007/MISC.2 (Mar. 2, 2007); see generally Márcio Santilli et al., Tropical Deforestation and the Kyoto Protocol: An Editorial Essay, 71 CLIMATIC CHANGE 267, 269–73 (2005) (describing the concept of compensated reductions for reduced deforestation).

<sup>105</sup> See UNFCCC, Conference of the Parties, Bali, Indon., Dec. 3–15, 2007, Report of the Conference of the Parties—Addendum, Part Two: Action Taken by the Conference of the Parties at its Thirteenth Session, dec. 1/CP.13, ¶ 1(b)(iii), at 3, U.N. Doc. FCCC/CP/2007/6/Add.1 (Mar. 14, 2008), available at http://unfccc.int/resource/docs/2007/cop13/eng/06a01.pdf.

contribute to sustainable development, biodiversity protection and climate change mitigation and adaptation.  $^{106}$ 

The Permanent Forum also noted the lack of support for REDD as currently constituted because of the fear that it would be one more form of top-down, externally driven forest management that disempowers indigenous peoples and undermines their use of the forests. Governmental decisions about forests have historically been made without the participation of forest-dwelling communities and involved distant government officials making concessions to foreign timber companies to exploit the forests where these communities live. Many forest-dwelling communities are concerned that in the REDD proposals, the national governments are just finding one more revenue stream that they can sell with little input from, or benefit to, forest-dwelling communities.

Such communities seek greater transparency and increased procedural rights in decisions that affect these forests. That includes a greater need for transparency and enforcement of their rights to grant (or withhold) prior informed consent with respect to activities on indigenous lands. These communities also seek a greater role in determining how the forest will be used and a greater share in the benefits from the carbon revenues that are associated with the forest.

Although it is still unclear how deforestation will ultimately be addressed in the international climate change regime, the rights-based approach has certainly forced the discussion in the climate negotiations to go beyond the extent to which carbon benefits arise from avoided deforestation. This is also true at the national level, where, for example, the Waxman-Markey American Clean Energy and Security Act that passed the U.S. House of Representatives conditions the availability of offsets from reduced deforestation to projects that "give due regard to the rights and interests of local communities, indigenous peoples, forest-dependent communities, and vulnerable social groups."

<sup>106</sup> ECOSOC, Permanent Forum on Indigenous Issues, *Report on the Seventh Session*, ¶ 44, U.N. Doc. E/2008/43 (May 2, 2008).

<sup>107</sup> Id. ¶ 45.

<sup>108</sup> Id. ¶¶ 44–45.

<sup>109</sup> See UNFCCC, Conference of the Parties, Presidential Proposal, Copenhagen Accord, Draft Decision -/CP.15, U.N. Doc. FCCC/CP/2009/L.7, ¶ 6 (Dec. 18, 2009) [hereinafter Copenhagen Accord] (endorsing REDD generally).

<sup>&</sup>lt;sup>110</sup> American Clean Energy and Security Act of 2009, H.R. 2454, 111th Cong. (1st Sess.) § 754(d)(6)(A) (2009).

#### E. Prioritizing Adaptation

In climate change parlance, adaptation measures are those measures that are meant to alleviate the impacts of climate change (as opposed to mitigation measures meant to avoid climate change). Examples of adaptation run the range from building higher levees, to preparing evacuation and disaster relief plans, to relocating climate refugees from coastal and island communities. Many potential adaptation measures are designed to avoid human suffering and, thus, may help countries meet their obligations to promote human rights.

In recent years, climate negotiators have been forced to increase their focus on adaptation, given that many climate impacts are virtually certain at this point and that human suffering and economic losses can be reduced through some adaptive strategies. As the 2007 IPCC report points out, "Even the most stringent mitigation efforts cannot avoid further impacts of climate change in the next few decades, which makes adaptation unavoidable." Indeed, where the need for adaptation was formerly viewed as decades away, recognition of current climate impacts, such as melting glaciers and sea ice, prolonged droughts, and more intense storms, has brought the timeframe for discussing adaptation forward, even in the United States.

The anticipated financial needs for adaptation are massive. UNDP estimates \$86 billion will be required for adaptation globally just by 2015. The Copenhagen Accord, negotiated in December 2009, provides an estimated \$30 billion in assistance for both mitigation and adaption from 2010 to 2012 increasing to \$100 billion per year by

III IPCC, Working Group II, Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, at 747 (2007), available at http://www.ipcc.ch/publications\_and\_data/ar4/wg2/en/contents.html (follow "Chapter 18: Inter-relationships between adaption and mitigation" hyperlink).

<sup>112</sup> UNDP Summary, supra note 59, at 26. A UNFCCC estimate puts the cost to developing countries between \$28 to \$67 billion per year by 2030, which is generally consistent with estimates from Oxfam (\$50 billion/year) and the World Bank (up to \$50 billion for developing countries). See Oxfam Int'l, Financing Adaptation: Why the UN's Bali Climate Conference Must Mandate the Search for New Funds (Dec. 4, 2007), http://www.oxfam.org.uk/resources/policy/climate\_change/bn\_bali\_adaptation.html (follow "Download full paper" hyperlink); UNFCCC, Investment and Financial Flows Relevant to the Development of an Effective and Appropriate International Response to Climate Change (2007), http://unfccc.int/cooperation\_and\_support/financial\_mechanism/items/4053.php (last visited Nov. 10, 2009).

2020.<sup>113</sup> These funds are expected to come from both public and private sources and are intended for both mitigation and adaption. The Adaption Fund, an innovative mechanism established by the Kyoto Protocol parties, receives two percent of the certified emission reductions (CERs) of each project approved through the clean development mechanism.<sup>114</sup> In this way, the Adaptation Fund may raise as much as \$300 million per year without relying on the foreign assistance budgets of developed countries, assuming that this mechanism continues beyond 2012, the final year of the Kyoto Protocol's current reporting period. Taken together, all of the currently identified sources of support for adaption remain substantially less than the estimated adaptation costs.<sup>115</sup>

A human rights perspective could have a significant role in enhancing and prioritizing international adaptation strategies. First, countries may be under an obligation to ensure that certain basic human rights are met in the face of a changing climate. For example, the right to food, water, and shelter after a natural disaster may generate demands for humanitarian response. This could enhance political, moral, and perhaps legal pressure on industrialized countries to provide larger amounts of money for adaptation.

Beyond the quantity of money, a human rights framework may help set priorities for where we spend limited adaptation money. In the case of natural disasters, for example, the right to housing suggests that people have the right to temporary housing and shelter while their permanent homes are being repaired. Providing basic shelter to the victims of natural disasters would arguably be a higher priority than other adaptation expenses. Viewed in this light, the

<sup>113</sup> Copenhagen Accord *supra* note 109; *see also* UNFCCC Ad Hoc Working Group on Long-Term cooperative Action Under the Convention, *Policy Approaches and Positive Incentives on Issues Relating to Reducing Emissions from Deforestation and Forest Degradation in Developing Countries; and the Role of Conservation, Sustainable Management of Forests and Enhancement of Forest Carbon Stocks in Developing Countries, Draft Decision -/CP.15, U.N. Doc. FCCC/AWGLCA/2009/L.7/Add. 6, ¶ 2(c) (Dec. 15, 2009) (proposed negotiating text referring to the rights of indigenous peoples in the context of REDD).* 

<sup>114</sup> Adaptation Fund, http://afboard.org/ (last visited Nov. 1, 2009); see generally Kyoto Protocol, supra note 33, art. 12 (defining a clear development mechanism).

<sup>115</sup> Third African Ministerial Conference on Financing for Development, Climate Change, Kigali, Rwanda, May 21–22, 2009, *Adaptation Financing Instruments*, at 1 (prepared by Richard J.T. Klein & Benito Müller) available at http://www.oxfordclimatepolicy.org/publications/KigaliPolicyBrief3.pdf.

<sup>116</sup> See, e.g., OHCHR Report, supra note 3, at 9.

<sup>117</sup> See, e.g., id. at 14.

victims of Hurricane Katrina, for example, would stand higher in the queue for adaptation funds than would those whose vacation homes in Miami Beach are threatened by coastal sea level rise. The same prioritization can be made based on the obligations to fulfill the right to food or water; fundamental human needs should be met first in implementing adaptation strategies or expending adaptation funds.

Central to effective adaptation is also the socio-economic capacity of the affected sectors of society. Sectors of society that have more resources, education, information, and wealth will be better able to adapt to climate-related disruptions than will disadvantaged or vulnerable groups. Effective adaptation policies thus require sensitivity to power imbalances in society. As the IPCC concluded with respect to gender disparities:

Empirical research has shown that entitlements to elements of adaptive capacity are socially differentiated along the lines of age, ethnicity, class, religion and gender. Climate change therefore has gender-specific implications in terms of both vulnerability and adaptive capacity. There are structural differences between men and women through, for example, gender-specific roles in society, work and domestic life. These differences affect the vulnerability and capacity of women and men to adapt to climate change. <sup>118</sup>

What the IPCC concludes regarding gender is also true of other vulnerable groups, including the very poor and indigenous peoples. For adaptation policies to be effective, they must not reinforce differential levels of vulnerabilities between gender, race, or class. This also suggests that adaptive strategies should not only be reactive in response to climate disruption, but should entail proactive capacity-building aimed at lifting the education, health, and wealth of the poorest and most vulnerable sectors of society. Put another way, efforts aimed at fulfilling related economic, social, and cultural rights will also improve the adaptive capacity of a country and its effective implementation of adaptation strategies.

#### CONCLUSION

For many environmentalists, the human rights system offers the promise of a robust set of principles attached to quasi-judicial bodies that offer the hope of enforcing these legal principles against a State. This is a significantly different approach than the complex management systems created to address environmental issues under

the existing climate change regime. International environmental law lacks a general framework of legally binding principles that could provide a clear framework for adjudicating relative rights and responsibilities in the case of a global environmental problem such as climate change.

Although the legal and moral weight of human rights tempts climate advocates, the overall approach of human rights—placing responsibilities on governments for the respect and promotion of its citizens' absolute human rights—may not be a perfect match for addressing the complexity of an issue like climate change. A rights-based approach implies that some positions or interests cannot easily be compromised. Taking these rights seriously would require more international focus on issues of liability, legal responsibility, and compensation—issues thus far generally ignored in the climate negotiations, but ones that should increase in importance as climate impacts worsen and the number of identifiable climate victims increase.

Regardless of the long-term success of the legal claims or obligations implicated by taking a human rights-based approach to climate change, the rights-based discourse is already having observable, positive impacts on international climate policies. Today, the human rights perspective acts as a counterweight to the technocratic approach of the carbon accountants, primarily focused on ensuring that we measure greenhouse reductions accurately and take the widest possible range of options for greenhouse gas reductions. Basic to this approach is a focus on the carbon market where technical questions of cost-effectiveness, additionality, and leakage dominate the discourse. A rights-based approach challenges the narrow perspective of the carbon accountants and marketeers.

It is not that the carbon accountants and marketeers are wrong, but simply that they have tunnel vision in their approach to climate change mitigation and little background for addressing issues of adaptation. Human rights advocates and climate change victims bring different expertise and a different way of thinking about climate change. Including rights-based institutions and voices in the climate debate will ultimately lead to greater cooperation and policy coherence between climate change and human rights. Thus, for example, mitigation approaches based on biofuels and REDD may

<sup>119</sup> See Sachs, supra note 9.

 $<sup>^{120}</sup>$  For a general discussion of issues surrounding the carbon market, see WOLD, HUNTER & POWERS, supra note 2.

look promising to the carbon accountants and marketeers, but may fall short when viewed through the lens of human rights. Similarly, the carbon accountants and marketeers bring little expertise relevant to prioritizing among a wide range of adaptation needs. Here, too, the rights-based approach brings perspective and expertise that holds the promise of setting adaptation priorities in a way that meets the twin goals of reducing climate change impacts while progressively fulfilling economic, social, and cultural rights.