

A Moral Imperative: The Human Rights Implications of Climate Change

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I. Introduction

Climate change is increasingly identified as one of the major crises facing the international community in the 21st century.¹ Even conservative forecasts predict dramatic effects to environments, economies, and people around the world. Although climate change is already understood as an environmental problem, and increasingly as an economic one,² the social and human rights implications of climate change are given little discussion. Yet climate change threatens food security, public health, property, and the livelihoods and lives of members of affected communities. Like other environmental issues, climate change threatens the human rights of those living in affected communities.

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1. Margot Wallstrom, *Climate Policy for the 21st Century: Meeting the Long Term Challenge of Climate Change: A European Perspective*, in CLIMATE POLICY FOR THE 21ST CENTURY: MEETING THE LONG-TERM CHALLENGE OF GLOBAL WARMING (David Michel, ed. 2006); Editorial, *Gas Taxes: Lesser Evil, Greater Good*, N.Y. TIMES, Oct. 24, 2005, at A20 (“There’s no serious disagreement that two major crises of our time are terrorism and global warming”); Survey, *The Heat is On*, THE ECONOMIST, Sept. 9, 2006 (17-page cover story on climate change).

2. The last two major reports on climate change released by states were largely environmental and economic: the *Arctic Climate Impact Assessment Report* was released by the United States in 2004, available at <www.acia.uaf.edu/pages/scientific.html> [hereinafter “Arctic Report”], and the largely economically focused Nicholas Stern Report was released by the United Kingdom in 2006, available at <www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/sternreview_index.cfm> [hereinafter “Stern Report”].

The ultimate goal of climate change advocacy is to encourage nations to scale back their greenhouse gas (GHG) emissions to a point where GHG concentrations in the atmosphere stabilize and then decrease to a level that prevents dangerous anthropogenic interference with the climate system.³ However, the sheer size of the problem and the cost of mitigation have forestalled meaningful engagement and cooperation on the issue.⁴ Lawyers and environmental advocates have begun to use litigation and other legal avenues as a way to forge progress. One particularly innovative example is a team of lawyers who recently used a human rights approach to climate change in a petition filed on behalf of the Inuit Circumpolar Conference⁶ in the Inter-American Commission on Human Rights (IACHR).⁷

This note aims to continue the discourse prompted by the Inuit Petition and explore related issues on climate change and human rights. Part II begins by surveying legal action from around the world related to climate change and highlights the human rights approach used in the Inuit Petition. Part III provides a snapshot of the problem of climate change and describes its disproportionate impact on certain communities. Part IV outlines the human rights that climate change potentially implicates and analyzes relevant human rights authority from the European system, Inter-American system, and African

3. See United Nations Framework Convention on Climate Change art. 2, May 9, 1992, 1771 U.N.T.S. 108.

4. The United States, the nation with the largest share of emissions (24 percent), has not even taken the preliminary step of ratifying the relevant international environmental treaty, the Kyoto Protocol to the United Nations Framework Convention on Climate Change, Dec. 11, 1997, 37 I.L.M. 22, available at <unfccc.int/essential_background/Kyoto_protocol/items/1678.php> [hereinafter "Kyoto Protocol"]. President Bill Clinton signed the Kyoto Protocol, but President George W. Bush stated shortly after taking office that the United States would not implement the Kyoto Protocol because "it exempts . . . China and India, from compliance, and would cause serious harm to the U.S. economy." PHILIPPE SANDS, *LAWLESS WORLD* 70 (2005).

5. The Inuit people are an indigenous people whose homeland is in the Arctic. The name "Inuit" comes from the Inuit-Inupiaq language and means "the people" or "the real people."

6. The Inuit Circumpolar Conference (ICC) is an international organization representing 150,000 people from Alaska, Canada, Greenland, and Chukotka, Russia. See <www.inuitcircumpolar.com> (visited Jan. 10, 2007).

7. 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 (submitted Dec. 7, 2005), available at <www.earthjustice.org/library/reports/ICC_Human_Rights_Petition.pdf> [hereinafter "Inuit Petition"].

system. Part V explains the utility of, and the need for, a rights-based approach. Part VI provides a review of, and response to, potential criticism of a human rights approach.

II. Enforcing Climate Change Law

Characterizing environmental harm to human populations in legal terms is always a complex task.⁸ The complexity and global nature of climate science make climate change particularly difficult to translate into legal terms. Since the 1990s, scientific evidence on the cause and effects of climate change has developed from “tentative and theoretical” to a growing international consensus.⁹ The Intergovernmental Panel on Climate Change (IPCC), an international body of scientists operating under the mandate of the U.N. Environment Program and World Meteorological Organization, called climate change “unequivocal” in their 4th Assessment Report.¹⁰ However, despite increased confidence and specificity in climate science, climate change litigation faces significant barriers to justiciability.

Suits involving climate change raise complex causation and redressability issues because any single polluter is likely to produce only a tiny proportion of the GHGs, and thus any judicial remedy is likely to have a small impact on solving the global problem.¹¹ Additionally, it is difficult to connect actors and claims to forums for litigation because climate change occurs in the atmosphere without respect to national boundaries.¹² Despite these obstacles, laws exist that can force governments and other parties to reduce their GHG emissions, and litigation is an increasingly prevalent means of holding parties responsible for climate change.¹³ In 2004 and 2005, courts in

8. Hari M. Osofsky, *Learning from Environmental Justice: A New Model for International Environmental Rights*, 24 STAN. ENVTL. L.J. 71, 74 (2005).

9. Some level of international consensus can be inferred from the work of the Intergovernmental Panel on Climate Change.

10. Elizabeth Rosenthal & Andrew C. Revin, *Panel Issues Bleak Report on Climate Change*, N.Y. TIMES, February 2, 2007 [hereinafter “N.Y. TIMES Climate Article”]; IPCC Reports available at <<http://www.ipcc.ch>>.

11. Bradford C. Mank, *Standing and Global Warming: Is Injury to All Injury to None?*, 35 ENVTL. L. 1, 6 (2005).

12. Hari M. Osofsky, *The Geography of Climate Change Litigation: Implications for Transnational Regulatory Governance*, 83 WASH. U. L. REV. 1789, 1802 (2005).

13. For an excellent summary of climate change litigation and cases, see *generally* Climate Justice, at <www.climatelaw.org/cases> (visited Nov. 4, 2006) [hereinafter “Climate Justice”].

Australia, Canada, New Zealand, Nigeria, and the United States heard climate change cases, and a number of cases are currently pending in both the European Union and the United States.¹⁴

The following survey is not exhaustive; it highlights the use of domestic legal action by environmental organizations and state governments. While climate change litigants have brought cases under different theories, all emphasize responsibilities and obligations rather than rights. Additionally, climate change litigation has been a step in the right direction, but has largely failed to emphasize the human rights and social consequences of climate change. In Part B, I discuss what a human rights legal action on climate change would look like, using the Inuit Petition to the IACHR as a model. Even if a purely human rights approach is not currently viable, perhaps the legal work of environmental organizations can highlight climate change impacts. One commentator suggests that polar bears are the icon for climate change.¹⁵ I propose instead that human beings are the icon for climate change and thus provide a powerful impetus for solving the problem.

A. Survey of Climate Change Litigation

Perhaps the most obvious approach to climate change litigation¹⁶ is one that uses domestic environmental laws. Citizens, cities, and states in the United States are becoming increasingly impatient with the Bush Administration's inaction on climate change and are starting to sue to force enforcement of environmental laws, such as the Endangered Species Act (ESA), Clean Air Act, and National Environmental Protection Act (NEPA).

In February 2005, the Center for Biological Diversity¹⁷ filed a petition with the U.S. Fish and Wildlife Service to list the polar bear as a threatened species under the ESA, claiming that polar bears face

14. *Id.*; Jonah Gbemre v. Shell et. al (November 2005); Genesis Power Ltd v. Franklin District Council, 2005 NZRMA 541 (Env't Ct. Auckland) [hereinafter "Genesis Power"].

15. Keiran Suckling, Center For Biological Diversity, *An icon for climate change: The polar bear* (2007), at <www.klamathbucketbrigade.org/Suckling_AniconforclimatechangeThepolarbear010707.htm> (visited Jan. 20, 2007) [hereinafter "Icon for Climate Change"].

16. Climate Justice, *supra* note 13.

17. In July 2005, Greenpeace and the National Resource Defense Council also joined the petition.

extinction because global warming is rapidly melting the polar bears' sea ice habitat.¹⁸ The petitioners pointed out that the ESA requires the government to identify and eliminate threats to imperiled species based solely on the best scientific information.¹⁹ Instead, the government's polar bear listing proposal refused to designate critical habitat areas, deeming the bear's habitat needs "undeterminable."²⁰ In the government's defense, Interior Secretary Dirk Kempthorne asserted that addressing the causes of global warming was "beyond the scope of the Endangered Species Act."²¹ Perhaps identifying and eliminating the causes of climate change are beyond the intended scope of the ESA. However, as long as the U.S. government fails to pursue much-needed policies on climate change and set adequate standards for emissions reductions, environmental groups will likely continue to use domestic environmental laws and, in the future, perhaps international human rights laws.

Massachusetts v. EPA recently became the first climate change case to reach the U.S. Supreme Court.²² The case originated when a coalition of environmental organizations petitioned the Environmental Protection Agency (EPA) to set emission standards for GHG emissions under the Clean Air Act. The petition asserted that the regulation of GHG emissions were within the scope of the Clean Air Act because the emissions were "air pollutants" reasonably anticipated to harm public health and welfare. The coalition also noted that the Act specifically defined welfare to include "climate." While the EPA denied the petition, the petitioners – including 12 states, several cities, and more than a dozen environmental organizations – immediately challenged the decision in fall of 2003. Without reaching the merits, the Court of Appeals for the D.C. Circuit ruled that the EPA acted within its discretion in deciding not to regulate emissions.²³ The Circuit denied rehearing en banc in

18. Ctr. for Biological Diversity, *Petition to List the Polar Bear (Ursus Maritimus) as a Threatened Species under the Endangered Species Act*, at <www.biologicaldiversity.org/swcbd/species/polarbear/petition.pdf> (visited Dec. 26, 2006).

19. Icon for Climate Change, *supra* note 15.

20. *Id.*

21. *Id.*

22. The U.S. Supreme Court heard oral arguments on *Massachusetts v. EPA* on November 29, 2006. A detailed chronology of the case, including the lower court decisions, are available at <<http://www.icta.org/global/war.cfm>>.

23. *Massachusetts v. EPA*, 415 F.3d 50 (D.C. Cir. 2005), cert. granted, 2006 WL 1725113 (U.S. Dist. Col. June 26, 2006) (No. 05-1120).

December 2005.²⁴ The U.S. Supreme Court granted petitioners' Petition for Writ of Certiorari on June 2, 2006.²⁵

In a highly anticipated ruling, the Court will decide two legal issues that may both impact U.S. climate change law and policy: 1) whether the EPA Administrator may decline to issue emission standards for motor vehicles based on policy considerations²⁶ which were not enumerated in section 202(a)(1); and 2) whether the EPA Administrator has authority to regulate carbon dioxide and other air pollutants associated with climate change under section 202(a)(1). Whatever the Court's decision, the mere consideration of these issues in the United States' highest court is significant. Additionally, petitioners have gained considerable support from key environmental and political figures such as former Secretary of State Madeleine Albright, former EPA Administrators, and numerous cities and states.

In 2005, U.S. litigants utilized procedural rights under NEPA to protest the Bush Administration's export credit support for fossil fuel projects. In that action, environmental organizations²⁷ and four cities (Plaintiffs)²⁸ brought action against United States export credit agencies, the Export-Import Bank (Ex-Im), and the Overseas Private Investment Corporation (OPIC).²⁹ The lawsuit alleges that Ex-Im and OPIC illegally provided more than \$32 billion in financing for oil fields, pipelines, and coal-fired power plants without assessing the affect on climate change or impact on the U.S. environment, as NEPA requires.³⁰ In August 2005, the U.S. District Court for the Northern District of California granted the Plaintiffs legal standing to proceed with the case and heard the merits in April 2006. The parties were awaiting a decision at the time this note was published.

Litigants in the European Union are pursuing a similar strategy,

24. *Massachusetts v. EPA*, 433 F.3d 66 (D.C. Cir. 2005).

25. *Petition for Writ of Certiorari*, *Massachusetts v. EPA*, 2006 WL 558353 (U.S.) (No. 05-1120).

26. These policy approaches include a belief that the science is still uncertain, a preference for the use of voluntary reductions, and claims that issuing such standards would affect the foreign policy powers of the president.

27. Friends of the Earth and Greenpeace.

28. The cities of Oakland, Arcata, and Santa Monica, Calif., and Boulder, Colo., are parties to the suit.

29. See *ClimateLawsuit.org*, at <www.climatelawsuit.org> (visited Jan. 24, 2007).

30. See Plaintiffs Motion for Summary Judgment, at <climatelawsuit.org> (visited Dec. 26, 2006).

utilizing procedural rights to address acts or omissions by governmental agencies. On June 15, 2004, two German non-governmental organizations (NGOs)³¹ commenced the first European case to enforce a law in the interest of combating climate change.³² The NGOs claim that the federal Environmental Information Act grants citizens the right to information about the extent to which Euler Hermes AG, an export credit agency, provides political and economic risk insurance to projects that produce GHGs.³³ Still pending adjudication, the case aims to force the German government to disclose this information and is essentially a means for civil society to gain leverage against the credit agency.³⁴

In 2005, the New Zealand Environment Court allowed a NGO to appeal the New Zealand government's decision to refuse permission to build a wind farm under the Resource Management Act of 1991. The government argued that the climate benefits of the wind farm were irrelevant due to the farm's relatively small size.³⁵ The court dismissed this argument and cited the reduction of emissions of GHGs and climate change as factors supporting the appeal.³⁶ The court relied in part on a September 2002 case, *Environmental Defence Society v. Auckland Regional Council and Contact Energy Limited*,³⁷ one of the first cases in the world where a court accepted that climate change was occurring and that human activities were likely causing the problem.

A recent Nigerian case successfully adopted a human rights approach to address an environmental injustice, though climate change was only a tangential issue.³⁸ In June 2005, communities from the Niger Delta filed a case in the Federal High Court of Nigeria against Shell, ExxonMobil, ChevronTexaco, the Nigerian National Petroleum Corporation, and the Nigerian government to stop gas flaring.³⁹ Gas flaring is an environmentally destructive process used

31. Germanwatch and BUND (Friends of the Earth Germany).

32. See Press Release, at <www.climatelaw.org/media/german.suit> (visited Dec. 22, 2006).

33. *Id.*

34. *Id.*; Osofsky, *supra* note 12, at 1812.

35. Genesis Power, *supra* note 14.

36. *Id.*

37. *Environmental Defence Society, Inc. v. Auckland Regional Council*, 2002 NZRMA 492 (Env't Ct. Auckland).

38. *Gbemre v. Shell Petroleum Dev. Co. Nigeria Ltd. et al.*, [2005] – F.H.C.N.L.R. – (Nigeria) [hereinafter “Gbemre v. Shell”].

39. The Climate Justice Programme and Environmental Rights Action/Friends of

by oil refineries, oil wells, chemical plants, and landfills to burn off and vent unusable waste gas. This case focused on resultant air and water pollution, though Nigeria's practice of gas flaring also causes more GHG emissions than all other sources in sub-Saharan Africa combined.⁴⁰

The Niger Delta communities argued that the practice of gas flaring and failure to undergo environmental impact assessments violated Nigerian gas flaring regulations and, significantly, the Delta communities' human rights.⁴¹ The communities specifically cited climate change as a harm caused by the flaring, which was incorporated into the Court's judgment: "The burning of gas by flaring in their⁴² community . . . contributes to adverse climate change as it emits carbon dioxide and methane which causes warming of the environment."⁴³ The Court ordered that gas flaring must stop in the Niger Delta community as it violates guaranteed constitutional rights to life and dignity.⁴⁴ The Nigerian case is one of the first where a national court held that climate change, like other environmental issues, may implicate human rights.

B. Human Rights Approach: the Inuit Petition to the IACHR

A climate change case utilizing a human rights approach could be brought in several fora. For example, a litigant could bring a case in domestic court, as in the Nigerian case. An applicant could also utilize U.N. mechanisms or regional structures, depending on the nature of the claim and desired remedy. Regional human rights systems operate in Europe, Africa, and the Americas, and have all ruled on environmental cases in the past.

The Inter-American human rights system has two principal legal sources: the American Declaration of the Rights and Duties of Man, an instrument adopted by the Organization of American States (OAS) with its Charter in 1948; and the American Convention on

the Earth Nigeria, *Gas Flaring in Nigeria: A Human Rights, Environmental, and Economic Monstrosity* (June 2005) available at <www.climatelaw.org/media/gas.flaring/report/report> [hereinafter "Gas Flaring in Nigeria"].

40. Energy Information Administration, *Country Analysis Briefs: Nigeria* (March 2006), at <<http://www.eia.doe.gov/emeu/cabs/Nigeria/Background.html>> (visited Dec. 26, 2006).

41. *Id.*

42. Referring to citizens of the Federal Republic of Nigeria.

43. *Gbemre v. Shell*, *supra* note 38, at para. 7(a).

44. *Id.*

Human Rights, which the OAS adopted in 1969 and which came into force in 1978.⁴⁵ The Inter-American Commission and the Inter-American Court of Human Rights are the bodies charged with implementing the American Convention.⁴⁶ Individuals may file petitions alleging human rights violations with the Commission, even if the state in question has not ratified the American Convention.⁴⁷ This was the approach chosen by the Inuit Circumpolar Conference (the Inuit), an international NGO representing 150,000 aboriginal inhabitants in Alaska, Canada, Greenland, and Russia.

On December 7, 2005, the Inuit, with the support of the Center for International Environmental Law (CIEL) and Earthjustice, filed a petition with the IACHR. The petition claimed that the United States' climate change policy violated the Inuit's human rights.⁴⁸ As the first legal action to specifically connect climate change and human rights, the petition opens the door to future human rights-based climate change legal action. Although the IACHR declined to consider the petition in December 2006, it is nonetheless worthwhile to identify the legal basis of the petition and analyze the merits of the arguments for future possible human rights claims.

The Inuit petition asserted that the United States' failure to reduce its national GHG emissions⁴⁹ has impacted the Arctic and harmed the Inuit and other communities.⁵⁰ The timely release of the Arctic Climate Impact Assessment, a study headed by U.S. scientists, bolstered the petition by providing scientific data on climate change impacts in the Arctic.⁵¹ The applicants believed that if the United States could not be held accountable for its emissions under

45. JOAN FITZPATRICK, FRANK NEWMAN & DAVID WEISSBRODT, *INTERNATIONAL HUMAN RIGHTS: LAW, POLICY, AND PROCESS* 24, 25 (Anderson 3d ed., 2001).

46. *Id.*

47. *Id.*

48. See Inuit Petition, *supra* note 7; Martin Wagner and Donald Goldberg, *An Inuit Petition to the Inter-American Commission on Human Rights for Dangerous Impacts of Climate Change*, at <www.earthjustice.org/library/reports/ICC_Human_Rights_Petition.pdf> (visited Dec. 26, 2006).

49. The United States has not employed policies to curb the practices of industries that exacerbate climate change, such as fossil fuel companies, automobile manufacturers, and electric utilities. See Inuit Petition, *supra* note 7, at 1.

50. *Id.* at 1 (The United States accounts for approximately 25 percent of the emissions).

51. Susan Joy Hassol, *Impacts of a Warming Arctic: Arctic Climate Impact Assessment (2004)* available at <<http://amap.no/workdocs/index.cfm?dirsub=%2FACIA%2Foverview1>>.

international human rights law, no country could be held accountable.⁵² The petition alleged that U.S. climate change policy violated several rights contained in the American Declaration of the Rights and Duties of Man (American Declaration), the OAS human rights instrument applied to states that are not parties to the American Convention on Human Rights.⁵³ The petition claimed violations of the rights to life, residence and movement, inviolability of the home, and preservation of health and to well-being.⁵⁴

The IACHR's procedural requirements presented formidable obstacles to the acceptance of the Inuit petition. The IACHR gives standing to any NGO legally recognized by an OAS Member State, thus giving CIEL and Earthjustice standing to submit petitions. The Inuit themselves do not live in an OAS member state, but argued that any group, regardless of national citizenship or residence, ought to be able to petition for redress of human rights violations by an OAS member state. Jurisdiction was also problematic because the United States is not party to the American Convention on Human Rights. The petition addressed this by pointing out that the Rules of Procedure of the IACHR and past practice recognize that the rights and obligations of the American Declaration may apply. Finally, the exhaustion of domestic remedies requirement may be waived if the IACHR finds an exception such as the absence of effective remedies or the inability to exhaust remedies for lack of resources.

Even if a petition meets standing and other requirements, there is no guarantee that the IACHR will hear the matter. The IACHR receives hundreds of petitions each year, and decides fewer than 60 of them.⁵⁵ Roughly half of these decisions concern the admissibility of the petition itself.⁵⁶ In refusing to review the merits of the Inuit's petition, the IACHR reasoned that, "... the information provided does not enable us to determine whether the alleged facts would tend

52. Interview with Donald Goldberg, Climate Change Attorney, Center for International Environmental Law, in Washington D.C. (April 24, 2003).

53. American Declaration of the Rights and Duties of Man, O.A.S. Official Rec., OEA/Ser.L./V./II.23, doc. 21, rev. 6 (1948), reprinted in Basic Documents Pertaining to Human Rights in the Inter-American System, OEA/Ser.L./V./II.82, doc. 6 rev. 1, at 17 (1992), available at <www.cidh.oas.org/Basicos/basic2.htm> [hereinafter "American Declaration"].

54. *Id.* at art. I, VIII, IX, and XI; Inuit Petition, *supra* note 7.

55. James L. Cavallaro & Emily Schaffer, *Less as More, Rethinking Supranational Litigation of Economic and Social Rights in the Americas*, 56 HASTINGS L. J. 217, 229 (2004).

56. *Id.*

to characterize a violation of rights protected by the American Declaration.”⁵⁷ Inuit leaders plan to seek a hearing to present more evidence and continuing to draw focus to “the human face” of climate change in the Arctic.⁵⁸

Despite the IACHR’s refusal to review the Inuit petition, the filing of the petition has garnered international media attention and sparked legal discourse. And, if the IACHR or other human rights fora examine the connection between climate change and human rights in the future, the petition could establish a legal basis for holding countries liable for profiting from inadequate GHG regulation. Further, a report or ruling by a human rights body could provide a strong incentive for all countries to ratify the Kyoto Protocol and participate in post-Kyoto diplomatic efforts.⁵⁹ At the very least, a human rights legal action in any forum would demonstrate that climate change not only affects the environment, but people as well.⁶⁰

III. Framing the Problem in Human Terms

A. Linking Climate Change to Human Rights

The impact of environmental problems such as air, water, and noise pollution on human health and well-being is widely recognized.⁶¹ Though the causal link between climate change and human rights is not as readily apparent, climate change impacts people’s health, food security, infrastructures, and natural resources.⁶²

57. Letter from the Commission is excerpted in an article by Jane George, Nunatsiaq News, *ICC climate change petition rejected*, (2006), at <www.nunatsiaq.com/news/nunavut/61215_02.html> (visited Jan. 20, 2007).

58. *Id.*

59. *See* Inuit Petition, *supra* note 7.

60. *Id.*

61. United Nations Conference on Environment and Development, June 3-14, 1992, *Rio Declaration on Environment and Development*, U.N. Doc. A/CONF.151/5/Rev.1 (1992); United Nations Conference on the Human Environment, June 5-16, 1972, *Stockholm Declaration on the Human Environment*, U.N. Doc. A/CONF.48/14/Rev.1 (1973); Convention on Long-Range Transboundary Air Pollution, Nov. 13, 1979, 18 I.L.M. 1442; Gabcikovo-Nagymoros Project (Hung. v. Slov.) 1997 I.C.J. 7 (Sep. 25); Advisory Opinion on Legality of the Threat or Use of Nuclear Weapons, 1996 I.C.J. 226 (July 8); Trail Smelter (U.S. v. Can.), 3 R.I.A.A. 1911 (1941). *See also* PHILIPPE SANDS, *PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW* (2d ed. 2003); PATRICIA BIRNIE & ALAN BOYLE, *INTERNATIONAL LAW AND THE ENVIRONMENT* (2d ed. 2002).

62. Intergovernmental Panel on Climate Change, *Third Assessment Report*:

But when is an environmental problem severe enough to become a human rights issue? One commentator suggests the adoption of a uniform approach that draws from U.S. environmental law to evaluate whether an environmental harm constitutes a human rights violation.⁶³ The approach assesses the geographic scope, duration, and severity of the environmental damage.⁶⁴ If these criteria are used, it appears that climate change will have significant social and human rights implications.

The geographic scope of climate change is truly global, including the Arctic, ocean currents, weather systems, tropical islands, and most land masses.⁶⁵ The duration of climate change is extensive. Scientists warn that even if GHG emissions stabilized today, temperatures and sea levels would continue to rise for another century or more because of the time lag in the ocean's response to atmospheric temperature change.⁶⁶ The severity of climate change will depend largely on GHG emissions over the next 50 years. However, climate scientists take this into account by using ranges of severity to describe the harm caused by global warming and even conservative estimates forecast significant impacts. In addition, many crucial facts are known already: The last nine years have been the warmest on record and the global mean temperature has already risen by .7 of a degree, causing the melting of polar ice caps and a rise in sea level.⁶⁷ Further, estimates for the future rise in temperature range from 1.4 to 5.8 degrees within the next century, which will likely have serious consequences.⁶⁸ Scientists warn that if the global temperature raises more than 2 degrees, the impacts will drastically accelerate, causing dramatic climatic and environmental changes.

In addition to impacts already occurring, a further temperature increase could lead to a decline in fisheries, fresh water supplies, the

Climate Change 2001: Impacts, Adaptation, and Vulnerability (2001), available at <www.grida.no/climate/ipcc_tar/wg2/index.htm> [hereinafter "IPCC Report"].

63. Osofsky, *supra* note 8, at 91.

64. *Id.* While this is not an authoritative standard for determining whether environmental harms constitute rights violations, the model provides a useful framework in Part II of this note for purposes of analysis.

65. IPCC Report, *supra* note 62.

66. T.M.L Wigley, *The Climate Change Commitment*, SCIENCE, March 18, 2005, at 1766; see also Bob Holmes, *Ocean Heat Store Makes Climate Change Inevitable* (March 17, 2005), at <<http://www.newscientist.com/article.ns?id=dn7161>> (visited Dec. 26, 2006).

67. IPCC Report, *supra* note 62, at 1.2, 9.3.6.2, 9.3.5.6, 11.5.3.

68. *Id.*

loss of forests and wetlands, and more severe weather.⁶⁹ Climate change likely causes an increase in the severity and frequency of extreme events and weather disasters, including storms, tropical cyclones, and droughts.⁷⁰ Climate change also causes warming of the oceans, rivers, and lakes, and poses a threat to fish stocks already under pressure from overfishing, pollution, and habitat loss.⁷¹ The decline in the numbers of fish could have a devastating impact on human populations, particularly in the poorer countries that rely on fish as a main source of their food supply. Higher temperatures may also lead to decreased crop yields and heat stress in livestock and wildlife.⁷²

B. Case Studies: The Inuit in the Arctic and Small Island Developing States

Climate change is gradually divorcing us from our land and eroding our subsistence way of life. Please think for a moment how you would react if climate change threatened your very existence as a distinct people.

– Sheila Watt-Cloutier, Chair, Inuit Circumpolar Conference⁷³

While the effects of climate change are widespread, they are not equally distributed among countries. The Arctic region is warming twice as fast as any other region, melting permafrost and thinning ice.⁷⁴ The rise in sea level and ocean warming predominately affect low-lying coastal areas and islands.⁷⁵ Global assessments consistently

69. A rise in the global average temperature by no more than 2°C to 3°C may be significant for biological and ecological processes. *Id.* See also RÜDIGER WOLFRUM & NELE MATZ, CONFLICTS IN INTERNATIONAL ENVIRONMENTAL LAW 80 (2003).

70. IPCC Report, *supra* note 62; Australia recently reported its worst drought in 1,000 years.

71. *Id.*

72. One well documented case study of this is the country of Mali, whose agriculture sector, and thus food security, is vulnerable to climate change. See Tanveer A. Butt, Bruce A. McCarl, Alpha O. Kergna, *Policies For Reducing Agricultural Sector Vulnerability to Climate Change in Mali*, CLIMATE POLICY 5, Feb. 13, 2006 at 583, available at <www.earthscanjournals.com/cp/005/0583/0050583.pdf>.

73. Climate Change in the Arctic: Perspectives of Indigenous Peoples, Informal Meeting to Discuss the Arctic Climate Impact Assessment, Svalbard, Norway (Aug. 6, 2003).

74. Hassol, *supra* note 51.

75. See IPCC Report, *supra* note 62; see also Cornelia Dean, *Next Victim of Warming: The Beaches*, N.Y. TIMES, June 20, 2006.

identify small island developing states (SIDS) and the Arctic region as high-risk areas that will suffer disproportionately from the negative impacts of climate change.⁷⁶

As discussed above, the Inuit people living in the Arctic region have already borne witness to the problems caused by climate change. The problems currently affecting the Inuit include rising sea levels, melting sea ice and glaciers, thawing of permafrost, and increased precipitation in some areas and drought in others.⁷⁷ As sea ice retreats and ecosystems shift, access to vital resources becomes more and more difficult for the Inuit.⁷⁸ Additionally, the retreat of sea ice and the thawing of permafrost have badly damaged Inuit villages.⁷⁹ The thawing permafrost has damaged houses, roads, airports and pipelines, and caused erosion, slope instability, and landslides.⁸⁰

In the near future, scientists project climate change will wreak the same havoc on peoples living in SIDS, jeopardizing their continued economic development.⁸¹ Small island countries such as the Maldives in the Indian Ocean, the Marshall Islands in the Pacific, and several Caribbean islands are particularly vulnerable. Climate change became a "clear and present issue" for these countries in August 1990, when the IPCC published its first report.⁸²

More than fifteen years later, these areas have already felt the effects of climate change. SIDS are among the poorest nations and have low-lying territories that may be inundated by a rise in sea level.⁸³ For instance, the people of the tiny Pacific island of Tuvalu fear that their island will disappear under rising sea levels within 50 years.⁸⁴ Climate refugees from some Pacific island states are already seeking shelter in neighboring countries.⁸⁵ Climate change may also impact island nations by causing an increase in the spread of infectious diseases, an increase in surface temperature, a change in

76. IPCC Report, *supra* note 62.

77. Inuit Petition, *supra* note 7.

78. *Id.*

79. *Id.*

80. *Id.*

81. Wallstrom, *supra* note 1.

82. SANDS, *supra* note 4, at 77.

83. *Id.* at 75.

84. Vanessa Houlder, *Climate Change Could be Next Legal Battlefield*, THE FINANCIAL TIMES (London), July 14, 2003, at 10.

85. Surviving Climate Change in Small Islands, at <www.tyndall.ac.uk/publications/surviving.pdf> (visited Dec. 26, 2006).

the acidity of oceans, changes in rainfall patterns, flash floods and landslides, drought, and changes in the intensity of tropical cyclones.⁸⁶ The Small Island Development Network believes climate change poses such an imminent danger that it recently published a guidebook for member states entitled *Surviving Climate Change in Small Islands*.⁸⁷

IV. The Impacts of Climate Change on Human Rights

The protection of the environment is ... a vital part of contemporary human rights doctrine, for it is a sine qua non for numerous human rights such as the right to health and the right to life itself.⁸⁸

There are arguably three viable strategies for constructing a human rights-based approach to climate change: 1) the application of procedural rights found in international human rights law to climate change litigation; 2) the recognition of a distinct right to environmental well-being; and 3) the re-interpretation of existing human rights in the environmental context.⁸⁹ This note adopts the third approach, arguing that existing human rights law should be expanded to encompass climate change impacts when appropriate.

Within the larger category of human rights there are two main categories of rights: civil and political rights,⁹⁰ and economic, social, and cultural rights.⁹¹ The two categories of rights differ in formation,

86. Over the next 100 years, small islands are likely to experience a rise in sea surface and air temperatures of between 1.4°C and 5.8°C and a rise in sea level as much as 9 millimeters per year.

87. *Id.*

88. *Hungary v. Slovakia*, 1997 I.C.J. at para. 13 (Sep. 25) (separate Opinion of Vice-President Weeramantry).

89. It is important to distinguish the environmental components of internationally recognized human rights from an independent, internationally recognized human right to a healthy environment.

90. The International Covenant on Civil and Political Rights (ICCPR) establishes civil and political rights, which grant the holder some control over decisionmaking. These rights are implemented immediately and must be respected by states. The ICCPR creates the Human Rights Committee (HRC), which oversees implementation and, by virtue of an optional protocol, creates an opportunity for individuals to petition the HRC. International Covenant on Civil and Political Rights, 1967, 999 U.N.T.S. 171.

91. The International Covenant on Economic, Social and Cultural Rights (ICESCR), 6 I.L.M. 362 (opened for signature Dec. 19, 1966), available at <esr.org/icescr>, establishes economic, social, and cultural rights which should be progressively implemented by parties to the Covenant.

and in their implementation and enforcement. The following explores the effects of climate change on both categories of rights, including the right to privacy and family, the right to property, the right to life, and the right to health. This section also highlights other links between human rights and climate change, such as indigenous rights, and the concept of “environmental refugees.” A further discussion of rights, such as the right to an adequate standard of living and the right to a healthy environment may also be applicable, but are outside the scope of this note.

As the following discussion illustrates, victims of environmental abuse have been able to obtain positive judgments from international and regional human rights bodies and tribunals. This suggests that the Inuit and SIDS, whose human rights are affected by climate change, may be able to do the same. The following identifies some of the human rights that have been implicated by environmental issues in the past and suggests that the consequences of climate change for certain communities may similarly warrant consideration under human rights law.

A. Right to Privacy, and Family Life

“No one shall be subjected to arbitrary interference with his privacy, family, home or correspondence, nor to attacks upon his honor and reputation. Everyone has the right to the protection of the law against such interference or attacks.”⁹²

– The Universal Declaration of Human Rights (UDHR)

For purposes of this analysis, the right to privacy and the right to family life will be addressed as one right, though they may otherwise be considered as separate rights. The right to privacy and family life has been invoked in relation to environmental issues under Article 8 of the European Convention on Human Rights, and may also be applicable to a human rights-based approach to climate change. For

92. Universal Declaration of Human Rights, art. 12, available at <cesr.org/udhr>. See also International Covenant on Civil and Political Rights, art. 17 (1976), available at <www.ohchr.org/english/law/ccpr.htm>, (“No one shall be subjected to arbitrary or unlawful interference with his privacy, family, home or correspondence, nor to unlawful attacks on his honour and reputation”); European Convention for the Protection of Human Rights and Fundamental Freedoms, art. 8, available at <http://www.echr.coe.int/NR/rdonlyres/D5CC24A7-DC13-4318-B457-5C9014916D7A/0/EnglishAnglais.pdf> (“Everyone has the right to respect for his private and family life, his home and his correspondence”).

example, in *Lopez Ostra v. Spain*, a Spanish national filed a petition claiming the noxious fumes and effluents emitted from a water plant near her residence violated her right to private and family life.⁹³ The European Court of Human Rights evaluated “whether the national authorities took the measures necessary for protecting the applicant’s right to respect for her home and for her private and family life . . .”⁹⁴ The Court ruled in favor of the applicant and recognized that “the consequence of environmental degradation may so affect an individual’s well being as to deprive her of the enjoyment of her private and family life.”⁹⁵

More recently, in *Hatton and Others v. United Kingdom*, several applicants living near London’s Heathrow Airport complained of excessive airport noise during the night.⁹⁶ The applicants alleged that the government failed to adequately regulate the airport noise and protect them against arbitrary interference with their right to privacy and family life under the European Convention.⁹⁷ The Chamber decision held that, even though the U.K. government did not itself own, control, or operate Heathrow airport, it nonetheless had a “positive duty to take reasonable and appropriate measures . . .” to secure the applicants’ rights to privacy and family life under the Convention.⁹⁸ The Court outlined the obligations of member states under the Convention and noted that with environmental issues, “mere reference to the economic well-being of the country is not sufficient to outweigh the rights of others.” The Court stressed that:

States are required to minimise, as far as possible, the interference with these rights, by trying to find alternative solutions and by generally seeking to achieve their aims in the least onerous way as regards human rights. In order to do that, a proper and complete investigation and study with the aim of finding the best possible solution which will, in reality, strike the right balance should precede the relevant project.⁹⁹

Applying this rigorous standard, the Chamber held that the United Kingdom had violated Article 8 of the Convention. The

93. See *Lopez Ostra v. Spain*, 20 Eur. Ct. H.R. 277 (1995).

94. *Id.*

95. *Id.*

96. *Hatton and Others v. UK*, Eur. Ct. H.R. 17 (2001).

97. *Id.*

98. *Id.* at 21.

99. *Id.*

Grand Chamber eventually overturned the violation of Article 8, finding that under the circumstances the United Kingdom had adequately balanced the rights of the individuals and the economic well-being of the community of a whole.¹⁰⁰ Despite the outcome of this case, the Grand Chamber never specifically overturned the Chamber's requirement that states consider human rights in their investigation of projects. This requirement remains a relevant standard in the European Human Rights system.

Climate change has drastically undermined the Inuit people's rights to home, privacy, and family life. Thawing permafrost is causing rapid coastal erosion of Inuit territory. In one village, seven houses have already been relocated, three have fallen into the sea, and engineers predict that the entire village of 600 houses could fall into the sea within the next 20 years.¹⁰¹ This is arguably a more severe interference with privacy and family life than that in *Lopez Ostra* or *Hatton*, and may similarly constitute environmental degradation that deprives the Inuit of enjoying these rights.

However, no Inuit communities are located in member states of the European Court of Human Rights. Even if they did, identifying the responsible actor would be extremely difficult. Who has arbitrarily deprived the Inuit of their rights to private and family life? The U.S. government? Corporate actors within the United States? These questions are currently unanswerable. However, scientific uncertainties are quickly being solved and will likely result in stronger causal links for climate change litigants.¹⁰²

B. Right to Property

The UDHR defines the right to property as follows: "1) Everyone has the right to own property alone as well as in association with others; 2) No one shall be arbitrarily deprived of his property."¹⁰³

While the textual definition of the right to property appears clear, scholars debate the breadth of its application. Article 17 of the UDHR, read literally, contains only a basic statement regarding the freedom to own property and the right not to be capriciously

100. *Hatton and Others v. UK* (GC), 2003-VIII Eur. Ct. H.R. 34.

101. Inuit Petition, *supra* note 7.

102. N.Y. TIMES Climate Article, *supra* note 10.

103. Universal Declaration of Human Rights, *supra* note 92, at art. 17.

deprived of it.¹⁰⁴ Neither the ICCPR nor the ICESCR mention a right to property. Further, statements of property rights under municipal law and in regional human rights documents are limited and refer to the right of “use and enjoyment” rather than ownership.¹⁰⁵ Some regional treaties treat individual property rights as subordinate to the public interest and give public authorities latitude for intervention. Taking into account the level of state intervention these regional treaties grant, the right to property may be “more weakly protected than any other right in these treaties.”¹⁰⁶ Despite limitations on the right to property, some peoples and communities affected by climate change may nonetheless have valid claims under the right.¹⁰⁷

For instance, climate change has put Inuit communities in the Arctic in danger of losing their homes. These communities now face mass resettlement choices and destruction of culturally and historically significant lands and buildings.¹⁰⁸ Thawing permafrost and coastal erosion has already forced several families to relocate.¹⁰⁹

In the near future, small island nations may also face the loss of property as low-lying territories become inundated from sea level rise. For example, some homes in Papua New Guinea’s Cataret Islands have already been washed away as a result of rising sea levels. At this point, authorities see resettlement as “the only action available.”¹¹⁰ In the Indian Ocean, the Maldives’ 1,200 coral islands lie so low that a tsunami briefly swamped the islands.¹¹¹ In 1998,

104. Prudence Taylor, *From Environmental to Ecological Human Rights: A New Dynamic in International Law*, 10 GEO. INT’L ENVTL. L. REV. 309, 324 (1998).

105. *See Id.* at 325. The European Convention on Human Rights, Protocol 1, art. 1, available at <www.hri.org/docs/ECHR50.html#P1.Art1>, and the American Convention on Human Rights, art. 21, available at <www.cidh.org/Basicos/basic3.htm>, refer to the use and enjoyment of property and state that it may be subordinate to the public interest. The German Grundgesetz (Germany’s Constitution), art. 14, available at <www.iuscomp.org/gla/statutes/GG.htm#14>, contains a statement of social obligation to serve the public good in conjunction with property rights.

106. Taylor, *supra* note 104 (citing Paul Sieghart, *THE LAWFUL RIGHTS OF MANKIND: AN INTRODUCTION TO THE INTERNATIONAL LEGAL CODE OF HUMAN RIGHTS* 132 (1985)).

107. *Id.*

108. *See* Inuit Petition, *supra* note 7; Arctic Report, *supra* note 2; IPCC Report, *supra* note 62.

109. This implicates not only the right to property, but the freedom to choose one’s residence and the right to privacy and family life, discussed in Part D.

110. Telephone interview by REUTERS with Joe Kaipu, Senior District Coordinator of Bougainville.

111. *Id.*

Maldives President Maumoon Abdul Gayoom published *The Maldives: A Nation in Peril*, outlining the danger of rising seas.¹¹² Gayoom recently told journalists, "We are doing all we can to protect our nation. However, what we do here in the Maldives does not guarantee us an environmentally secure future."¹¹³

Though the above instances demonstrate a deprivation of the right to property, it is not clear whose action is infringing upon that right. Since individuals most often assert the right to property against their own states, the best climate change claim within the United States based on a right to property would probably come from United States citizens living in an affected area, such as Alaska or Florida.

C. *Right to Life*

The right to life is increasingly understood to include the traditional protection against intentional or arbitrary deprivation of life, as well as the state's obligation to ensure that every individual within its boundaries has access to means of survival.¹¹⁴ One international scholar, B. G. Ramcharan, defines an expansive right to life that enables each individual to "have access to the means of survival; realize full life expectancy; avoid serious environmental risks to life; and to enjoy protection by the State against unwarranted deprivations of life."¹¹⁵ Under this definition, even if environmental protection would extend only to those "environmental hazards which involve direct risks of immediate loss of life if the hazard is not removed,"¹¹⁶ climate change warrants protection under the right to life.

Past legal decisions have relied on the UDHR's "right to life" clause to vindicate environmental harms. One case addressed the right to life of the Yanomani Indians of Brazil before the IACHR.¹¹⁷

112. *Id.*

113. *Id.*

114. Luis E. Rodriguez-Rivera, *Is the Human Right to Environment Recognized Under International Law? It Depends on the Source*, 12 COLO. J. INT'L ENVTL. L. & POL'Y 1, 19 (2001).

115. *Id.* (citing B.G. Ramcharan, THE CONCEPT AND DIMENSION OF THE RIGHT TO LIFE, IN THE RIGHT TO LIFE IN INTERNATIONAL LAW 7 (B.G. Ramcharan ed., 1985)).

116. Rodriguez-Rivera, *supra* note 114, at 13.

117. Sumudu Atapattu, *The Right to a Healthy Life or the Right to Die Polluted?: The Emergence of a Human Right to a Healthy Environment Under International Law*, 16 Tul. ENVTL. L.J. 65, 100 (2002); see Case 7615 (Brazil), Inter-Am. C.H.R., Res. No. 12/85, OEA/ser.L/V/II.66, .doc. 10 rev. 1 (1985), available at <www.cidh.org/annualrep/84.85eng/brazil7615.htm> [hereinafter "Case 7615"].

The Brazilian government constructed a highway through Yanomani territory, causing environmental damage and allegedly violating the Yanomani's right to life under the American Declaration of the Rights and Duties of Man.¹¹⁸ The IACHR Commission decided in favor of the petitioners, holding that the Brazilian government violated the Yanomani's right to life, liberty, and personal security by failing to take environmental measures to prevent environmental damage.¹¹⁹

In 2004, the European Court of Human Rights decided *Oneryildiz v. Turkey*,¹²⁰ its first environmental case involving the loss of life.¹²¹ The applicant lived in a poor area of Istanbul built around a garbage dump under the authority of the City Council.¹²² An expert report observed that no measures had been taken to prevent a possible explosion of methane gas from the dump and such an explosion subsequently occurred.¹²³ The explosion caused the death of eleven people, including the applicant, who lost nine members of his family.¹²⁴ The applicant based his claim on the right to life provision of Article 2 of the ECHR, arguing that the relevant authorities' negligence caused the accident.¹²⁵ The Court found that the authorities had committed a procedural violation of Article 2's right to life, and violated other rights espoused in Protocols to the European Convention.¹²⁶

When a nation fails to take reasonable measures to prevent environmental damage, and the result of such non-action is climate change, those harmed may seek redress for violations of their right to life. For example, Alaskans affected by sea level rise or the melting of polar ice caps may assert a right to life claim against the United States for failing to take action. However, the damage at issue must reach serious proportions in order to invoke the right to life.

118. *Id.*

119. *Id.*

120. *Oneryildiz v. Turkey* (GC), 2004-XII, Eur. Ct. H.R. 657.

121. *Id.*; Analysis of this case relies substantially on that by Jan van de Venis, *Sustainable Development and the development of the Human Right to a Healthy and Clean Environment* (A background legal paper presented at the International Association of Lawyers (UIA) 50th Congress, Salvador, Brazil, 31 Oct. 2006 – 4 Nov. 2006) [hereinafter "*Van de Venis Background Paper*"].

122. *Id.*

123. *Id.*

124. *Id.*

125. *Id.*

126. *Id.*

Additionally, when climate change directly threatens the right to life, it may be too late to seek redress.

D. Right to Health

Economic, social, and cultural rights such as the right to health have been deemed “positive rights” because they require governments to *do* something. It is often difficult to determine what a government must do to ensure its citizens’ economic, social, and cultural rights and whether and when a government’s failure to protect these rights is a human rights violation. Despite these obstacles, economic, social, and cultural rights are becoming increasingly enforceable by law.

As with other environmental problems, an examination of human health impacts provide the strongest link between climate change and human rights.¹²⁷ Climate change poses serious health consequences, including premature death, serious illness, and the spread of disease.¹²⁸ Quoting the Commission on Sustainable Development’s report on Health and Sustainable Development, human health expert Sumudu Atapattu described the effect of climate change on human health:

The long-term health consequences of human-induced climate change are likely to be profound and include threats to the food supply, natural disasters, infectious diseases, sea-level rise, changes in precipitation patterns and increased frequencies of extreme climate events, which may impinge particularly upon some of the least developed countries.¹²⁹

Warmer temperatures may worsen the effects of air pollution because the impacts of some pollutants on health, such as increased asthma attacks and heat stroke, are more evident in higher temperatures.¹³⁰ In addition to warmer temperatures, changes in climate such as humidity, sea level rise, and altered rainfall affect the

127. See, e.g., the international environmental frameworks for transboundary air pollution, persistent organic pollutants, and marine pollution.

128. Climate change has been linked to 21,000 estimated premature fatalities in Europe in 2003, SANDS, *supra* note 4, at 69, and a rise in malaria and asthma. Dr. Paul Epstein, CLIMATE CHANGE FUTURES, available at <www.climatechangeandfutures.org/pdf/CCF_Report_Rinal_10.27.pdf>.

129. The Secretary-General, Report of the Secretary-General on Health and Sustainable Development, prepared for the World Summit on Sustainable Development, E/CN.17/2001/PC/6, at 12-13.

130. IPCC Report, *supra* note 62.

potential transmission of infectious diseases. This could lead to increased instances of malaria, dengue fever, and even the plague.¹³¹ It may also lead to the increase of rodent-borne diseases such as hantavirus, tick-borne diseases, water-related infectious diseases, and airborne diseases.¹³² The ICESCR recognizes the human right to health as the “right of everyone to the enjoyment of the highest attainable standard of physical and mental health.”¹³³ The right to health is not only important in and of itself, but is crucial to the enjoyment of other rights.¹³⁴ If a person suffers from a health problem, he or she may be unable to enjoy the right to work and the right to an adequate standard of living.¹³⁵

The link between health and environment has long been recognized in both human rights and environmental jurisprudence. In *Arrondelle v. United Kingdom*, the European Commission on Human Rights deemed admissible an applicant’s claim that the ‘intensity, duration, and frequency of noise’ from a British airport and a highway near the applicant’s home affected her health in violation of Article 8 of the European Convention of Human Rights.¹³⁶ Additionally, almost all environmental treaties recognize the impact of environmental degradation on human health.¹³⁷ A recent resolution adopted by the United Nations General Assembly articulates the link, stating that “all individuals are entitled to live in an environment adequate for their health and well-being.”¹³⁸

131. *Id.*

132. *Id.*

133. ICESCR, *supra* note 91, at art. 12.

134. Sumudu Atapattu, *The Public Health Impact of Global Environmental Problems and the Role of International Law*, 30 AM. J. L. & MED. 283, 285 (2004).

135. *Id.*

136. *See Arrondelle v. United Kingdom*, 5 Eur. Ct. H.R. 118 (1983).

137. *See* Convention on Long-range Transboundary Air Pollution, art. 2, Nov. 13, 1979, 1302 U.N.T.S. 217, 18 I.L.M. 1442; Basel Convention on the Control of Transboundary Movement of Hazardous Wastes and Their Disposal, Preamble, 1989, U.N. Doc. UNEP/WG.190/4, available at <www.basel.int/text/con-e-rev.pdf>; Rotterdam Convention on Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, pmbl. Sept. 10, 1998, in *Final Act of the Conference of Plenipotentiaries on the Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade*, U.N. Environment Programme & Food and Agriculture Organization of the United Nations, U.N. Doc. UNEP/FAO/PIC/5.

138. United Nations General Assembly Resolution 45/94. In addition to recognition of the right to health by the UN Charter, the World Health Organization, the Universal Declaration of Human Rights, and ICESCR, there is significant support for the linkage in Europe. The texts of the European Social Charter and

The African Commission on Human and Peoples' Rights found a violation of the right to health in an environmental case, suggesting that the forum would be open to other environmental human rights claims. In *Social and Economic Rights Action Center for Economic and Social Rights v. Nigeria*, the Commission found that Nigeria had violated several human rights espoused in the African Charter on Human and Peoples' Rights, including Article 16(2), which requires that "States Parties to the present Charter shall take the necessary measures to protect the health of their people"¹³⁹ The Commission found that Shell's operations contaminated the water, soil, and air, causing both short-term and long-term health problems for the Ogoni people. Since Nigeria was party to the African Charter, and its government had failed to restrain Shell's behavior and protect their citizens, the Commission found that they had violated the Charter.

As with the other climate change impacts, the Inuit and SIDS feel the brunt of health effects, which occur with greater frequency and severity. For instance, climate change exacerbates health threats from toxics present in mercury and PCBs and exposure to cancer-causing UVB radiation, which are already present in the Arctic. SIDS are particularly susceptible to high instances of transmission of infectious diseases like malaria.¹⁴⁰

E. Additional Linkages between Human Rights and Climate Change

In addition to expanding and reformulating existing human rights to include climate change, it is useful to address indigenous rights and the right to self-determination, as well as the concept of "environmental refugees."

1. Indigenous Rights and the Right to Self-Determination

The special relationship between indigenous peoples' way of life and their land has long been recognized in the human rights

European Convention on Human Rights explicitly recognize a link, and the European Commission on Human Rights deemed a case admissible which linked the environmental nuisance of an airport with the right to health.

139. Communication No. 155/96, African Commission on Human and Peoples' Rights, (2001).

140. See SIDS, at <www.sidsnet.org> (visited Dec. 21, 2006).

context.¹⁴¹ Indigenous peoples often inhabit some of the world's most vulnerable ecosystems and suffer from some of the worst effects of environmental degradation.¹⁴² The link between indigenous peoples' way of life and their land may establish that "removal from or destruction or degradation of traditional lands inevitably leads to serious loss of life and health and damage to the cultural integrity of indigenous peoples."¹⁴³ Many indigenous rights implicated by climate change have been addressed above, such as the rights to health and property. However, climate change may implicate other individual indigenous rights – including the rights of self-determination, self-identification, and participation – as well as collective indigenous rights, such as the rights to culture and resources.¹⁴⁴

The United Nations Charter, the International Covenant on Civil and Political Rights (ICCPR), and the International Covenant on Economic, Social, and Cultural Rights (ICESCR) all declare a right of self-determination, reflecting an international policy of decolonization.¹⁴⁵ By virtue of this right, indigenous peoples "shall freely determine their political status and freely pursue their economic, social, and cultural development."¹⁴⁶ This right, which encourages recognition of indigenous rights over land, hunting, fishing grounds, and mineral resources, is often at odds with ecological protection.¹⁴⁷ However, in the case of climate change, ecological protection and the right of self-determination are in harmony.¹⁴⁸ The SIDS and the Inuit in the Arctic illustrate that indigenous people depend greatly on natural resources, especially marine resources, for their livelihoods. Exercising the right of self-

141. See Case 7615, *supra* note 117.

142. Taylor, *supra* note 104, at 370 (citing William A. Shutkin, *International Human Rights and the Earth: The Protection of Indigenous Peoples and the Environment*, 31 VA. J. INT'L L. 479, 493-500 (1991)).

143. Human Rights and the Environment: Final Report, U.N. Doc. E/1994/CN.4/Sub.2/9, para. 77 (1994).

144. Some commentators assert that the effect of environmental disasters on indigenous peoples may even be characterized as genocide, apartheid, or ethnocide; however, such characterizations seem a bit disingenuous and could dilute the gravity of these words, which should be reserved for only the worst crimes against humanity.

145. Taylor, *supra* note 104, at 330.

146. International Covenant on Economic, Social, and Cultural Rights, 1966, Part I, art. 1, 993 U.N.T.S. 3.

147. Jeremy Firestone, Jonathan Lilley, & Isabel Torres de Noronha, *Cultural Diversity, Human Rights, and the Emergence of Indigenous Peoples in International and Comparative Law*, 20 AM. U. INT'L L. REV. 219, 237 (2005).

148. *Id.*

determination and protecting the ecosystem from climate change are therefore one and the same.

The right of self-determination is especially important because it implicitly protects the rights of future generations.¹⁴⁹ Self-determination preserves the diversity of human culture and reflects the importance of choice of culture.¹⁵⁰ The right also reflects the societal value that peoples should have the right to freely choose their culture. This necessarily encompasses intergenerational equity, meaning that the actions of this generation should not undermine the rights of future generations.

2. Environmental Refugees

The 1951 United Nations Convention Relating to the Status of Refugees (Refugee Convention) defines a refugee as any person who, "owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country."¹⁵¹ In recent years, scholars have identified a new class of refugees who require the protection of international law: persons displaced by the environment. An environmentally displaced person is 1) one who leaves his or her home and seeks refuge elsewhere, and 2) does so for reasons relating to the environment. In the face of environmental problems such as drought, desertification, and floods, and the human mismanagement that often accompanies and exacerbates these problems, affected people may feel that they have no alternative but to leave their homes in order to survive.¹⁵² Migration in response to environmental degradation is fast becoming the most pervasive form of forced migration to occur in the 21st century.¹⁵³ The number of people seeking refuge from environmental degradation, currently estimated

149. Interview with Naomi Roht-Arriaza, University of California Hastings College of the Law, San Francisco, Calif. (Nov. 30, 2005).

150. *Id.*

151. Convention Relating to the Status of Refugees, art. 1(A)(2), July 28, 1951, 19 U.S.T. 6259, 6261, 189 U.N.T.S. 137, 152 [hereinafter Refugee Convention].

152. See Norman Myers, Climate Inst. Of Wash., D.C., 150 ENVIRONMENTAL REFUGEES 18 (1995).

153. *Id.* ("As the problem overall becomes more pressing, our responses fall further short of measuring up to the challenge. The surge in refugee numbers is outpacing the ability of the world to cope").

at 25 million,¹⁵⁴ is growing more rapidly than any other refuge-seeking group. This number could swell to 50 million by 2010 and reach over 100 million by 2050.¹⁵⁵

It is uncertain whether the current definition of refugee under the Refugee Convention would cover environmentally displaced persons. One commentator argues that environmental refugees fall within this definition and deserve official refugee status and the accompanying protections from all nations signatory to the Refugee Convention.¹⁵⁶ However, environmental refugees do not ostensibly satisfy either the “persecutions” or “reasons of” requirements of the refugee definition. The “persecution” requirement demands “an act of government against individuals” and, in the case of climate change, irresponsible climate change policy may not constitute such an act. Additionally, environmental refugees may have trouble demonstrating that they were persecuted “for reasons of” their membership in a social group. This requirement is technically satisfied if environmental refugees are characterized as part of a social group of persons who lack the political power to protect their own environment, and that their membership in this group forces them to migrate.¹⁵⁷

Some scholars urge the international community to address the problem of environmentally displaced persons with a new Convention to Protect Environmentally Displaced Persons to specifically govern this population. Under this new Convention, states would assume obligations and duties in order to solve these problems in their own jurisdictions.¹⁵⁸ This approach could use the Convention Against Torture as a model agreement because it would offer interim protections and outline state obligations.¹⁵⁹ Whether environmental refugees are covered under the existing Refugee Convention definition of refugee, or a new Convention for Environmentally Displaced Persons, the large influx of refugees

154. As it is difficult to calculate the exact number of people for whom environmental degradation is the primary cause of forced migration, the environment is at least a factor for the majority of “non-traditional refuge-seekers.” *See id.* at 29.

155. Jessica B. Cooper, Note, *Environmental Refugees: Meeting the Requirements of the Refugee Definition*, 6 N.Y.U. ENVTL. L.J. 480, 484-485 (1988).

156. *Id.* at 486.

157. *Id.* at 522.

158. *See* Dana Falstrom, *Stemming the Flow of Environmental Displacement: Creating a Convention to Protect Persons and Preserve the Environment*, COLO. J. INT’L ENVTL. L. & POL’Y 1 (2001).

159. *Id.*

created by the problems of climate change is a crucial issue that must be addressed in the near future.

The IPCC warns that rising sea levels will not only inundate low-lying territories, but will foul freshwater supplies for millions of people and spur mass migrations. Papua New Guinea's Carteret Islands are becoming uninhabitable and disappearing below the waves.¹⁶⁰ The islanders are some of the world's first climate change refugees.¹⁶¹ Many have already decided to move to the larger nearby Bougainville Island.¹⁶² Tuvalu Prime Minister Maatia Toafa declined to use the term "environmental refugee" in a recent public statement but admitted that his 11,600 people may soon have to abandon their South Pacific island homes.¹⁶³ Funafuta, a small island off Tuvalu's capital, has already disappeared beneath the sea.¹⁶⁴ Food security presents an escalating issue as the high salt content in the drying soil makes growing crops increasingly difficult.¹⁶⁵ Toafa warns that "the prediction is [that] in 50 years Tuvalu will not exist."¹⁶⁶

V. The Utility of a Human Rights Based Approach to Climate Change Litigation

A human rights-based approach to climate change would integrate the theoretical and advocacy approaches of international environmental law and human rights law.¹⁶⁷ This approach could result in a renewed sense of urgency in the stagnant political debate over climate change and jumpstart international diplomacy towards solutions such as the Kyoto Protocol. The approach makes sense from a legal and theoretical standpoint because both international human rights law and international environmental law limit the traditional independence and autonomy of state sovereignty.¹⁶⁸

This approach is needed because customary international law

160. Michael Perry, *Islands Battle Rising Seas for Survival*, REUTERS (Sydney) (Nov. 22, 2005), available at <news.yahoo.com/s/nm/20051123/sc_nm/environment_islands_dc>.

161. *Id.*

162. *Id.*

163. *Id.*

164. *Id.*

165. *Id.*

166. *Id.*

167. These are the general benefits of connecting human rights and the environment given by CIEL, and applied specifically to climate change.

168. Van de Venis Background Paper, *supra* note 121, at 1.

principles originated before environmental problems such as climate change entered the legal discourse.¹⁶⁹ The route pursued by the international community, diplomacy and treaty governance, has been largely ineffective in addressing the mitigation of, and adaptation to, climate change.¹⁷⁰ This is due in large part to the general reluctance of states to relinquish sovereignty in order to address global environmental problems.¹⁷¹ Current international environmental law does not adequately protect human life and dignity from the threats associated with environmental degradation.¹⁷² Victims of environmental harm can benefit from a human rights-based approach to environmental litigation because “international human rights law provides a basis for intervention when harm occurs solely within another state’s borders while international environmental law generally does not.”¹⁷³ Reformulating existing human rights in the environmental context would garner more effective environmental protection by taking advantage of existing international and regional monitoring and enforcement mechanisms, which are more developed in the human rights arena than they are in the environmental arena.¹⁷⁴

Human rights (such as the right to health, property, and life) would be better protected and more fully developed if commentators acknowledged that the individual “not only operates in a social environment, but also in a natural environment.”¹⁷⁵ A human rights analysis of climate change is necessary because states have largely focused on the environmental and economic implications of climate change rather than its human rights implications.¹⁷⁶ Cost-benefit analyses by themselves “inadequately recognize non-market costs [such] as loss of life and changes in quality of life,”¹⁷⁷ and fail to take into account the disproportionate distribution of costs to individual states and non-state actors.

Another reason to pursue a human rights-based approach is that environmental governance on climate change, primarily the United Nations Framework Convention on Climate Change (UNFCCC) and

169. See Rodriguez-Rivera, *supra* note 114, at 7.

170. *Id.*

171. *Id.*

172. *Id.* at 32.

173. Osofsky, *supra* note 8, at 78.

174. See Rodriguez-Rivera, *supra* note 114, at 18.

175. Taylor, *supra* note 104, at 346.

176. See Arctic Report and Stern Report, *supra* note 2.

177. IPCC Report, *supra* note 62.

the Kyoto Protocol,¹⁷⁸ do not provide remedies for injured parties. Though international foras will not likely issue injunctive relief to restrict GHG emissions, they can issue monetary relief to help underwrite the cost of climate-change-related weather damage (e.g., the cost of building seawalls) or establish special funds to build coastal defenses, protect fresh water supplies, and develop new forms of agriculture.¹⁷⁹

As discussed in Part II, a human rights-based approach to climate change is one of many viable litigation approaches. There are several other possibilities for adjudicating human rights claims relating to climate change. States could bring claims against other states in the International Court of Justice. Individuals could also bring complaints against states in the European Court of Human Rights, the IACHR, and possibly the OECD. Furthermore, indigenous and other displaced peoples could bring complaints to the World Bank Inspection Panel.

The claims of indigenous peoples may be well-suited for consideration by the World Bank Inspection Panel, particularly since the Bank's two-pronged internal policy focuses on indigenous peoples and displacement issues. The World Bank's Indigenous Peoples Operational Policy, and Procedure on Indigenous Peoples, recognize the need to give a "voice to potentially affected indigenous peoples in design and implementation of Bank-assisted projects." All that is required to make a request for investigation by the Inspection Panel is that two or more people in the country where the Bank-financed project is located believe that as a result of the Bank's violation, their rights or interests have been, or are likely to be, adversely affected. The World Bank Inspection Panel could serve as a venue for indigenous peoples to give input on projects such as coal plants, pipelines, and other matters that have direct links to increasing GHG emissions.

Even if the successful adjudication of human rights claims relating to climate change does not yet have adequate causal or legal support, the characterization of the problem as human, rather than merely environmental, would subject states' activities to increased international scrutiny. This alone could elevate the discourse on climate change. Currently, even preliminary discussions are lacking in the United States, despite the release and success of Al Gore's

178. Kyoto Protocol, *supra* note 4.

179. Mank, *supra* note 11.

documentary on climate change, *An Inconvenient Truth*.¹⁸⁰ Ideally, increased visibility of the human rights implications of climate change would spark new cooperation in climate change diplomacy. In 2012, the global community will need to re-define the current framework for emission reductions set out by the Kyoto Protocol. In developing this framework, the leaders will have a number of options, such as implementing or amending Kyoto, establishing regional frameworks, or altogether replacing Kyoto.¹⁸¹ Perhaps the vigor and urgency with which leaders establish new emissions reductions targets could be bolstered by a better understanding of the human rights issues at stake.

This strategy fostered significant international cooperation and progress on the issue of persistent organic pollutants (POPs) and contributed greatly to the success of the negotiation and implementation of the Stockholm Convention.¹⁸² Although never produced and rarely used in the Arctic region, scientists discovered POPs in the traditional food that the indigenous Inuit people depend on for their nutrition and their cultural and spiritual identity.¹⁸³ Because these chemicals bio-magnify and bio-accumulate through the marine food chain, scientists also discovered the chemicals in the blood and breast milk of the Inuit people themselves. Sheila Watt-Cloutier, the representative of the Inuit Circumpolar Conference was able to highlight the moral component of the POPs issue by expressing to the world the effect that these contaminants had on her people: "There may only be 155,000 Inuit in the entire world, but the Arctic is the barometer of the health of the planet and if the Arctic is poisoned so are we all."¹⁸⁴

Highlighting the human rights implications of climate change would help put a human face on the issue and further engage affected

180. See generally *An Inconvenient Truth: The Planetary Emergency of Global Warming and What We Can Do About It*, (Paramount Pictures 2006).

181. See Backgrounder on Options for the Post-2012 Climate Regime, International Institute for Sustainable Development, available at <http://www.iisd.org/climate/unfccc/post_2012_background.asp>.

182. See DAVID DOWNIE & TERRY FENGE, *NORTHERN LIGHTS AGAINST POPs, COMBATING TOXIC THREATS IN THE ARCTIC* (2003).

183. Canadian data, mainly produced through the very successful Canadian Federal Northern Contaminants Program (NCP) and the Arctic Monitoring and Assessment Program (AMAP) of the Arctic Council, has shown that many of the chemicals dealt with under the Convention have been found at levels of concern in the environment and people, particularly the Inuit.

184. *Id.*

indigenous peoples.¹⁸⁵ The plight of the Inuit people and the ability of emissaries such as Watt-Cloutier to illustrate their role as “canaries in the coal mine” gave urgency to the POPs issue and contributed greatly to the diplomatic success of the negotiation and later implementation of the Stockholm Convention.¹⁸⁶ The Inuit and the people of SIDS could similarly show the world the current devastation that climate change is having on their populations and provide a window into what the rest of the world will face if climate change continues to go unmitigated.

VI. A Response to Possible Criticisms Regarding a Human Rights-Based Approach to Climate Change

There are admittedly many obstacles to using a human rights-based approach. As one scholar noted, “existing right[s] must be reinterpreted with imagination and rigor in the context of environmental concerns which were not prevalent at the time existing rights were first formulated.”¹⁸⁷

One theoretical problem to a human rights approach to climate change is that it may require subjective valuation of some rights over others. While climate change will seriously threaten the basic human rights of some individuals and groups, it may actually be beneficial for others. Climate change jeopardizes the lives and livelihoods of the Inuit and SIDS such as the Maldives and Tuvalu. However, the melting of sea ice could open up new sea routes for Russia, Iceland, and Canada, and parts of Russia might benefit from an increase in crop yields.¹⁸⁸ In other words, if the Inuit have a human right to health and life, do not the people of Russia and Iceland have an equal right to development? This argument is largely unsupported by scientific evidence. Highlighting the so-called “benefits” of climate change is disingenuous and fails on two accounts. Using the example of increasing crop yields, it seems that: 1) any increases in yields could

185. Rupa Gupta, Note, *Indigenous People and the International Environmental Community: Accommodating Claims Through a Cooperative Legal Process*, 74 N.Y.U. L. REV. 1741 (Dec. 1999).

186. See generally DOWNIE & FENGE, *supra* note 182.

187. Rodriguez-Rivera, *supra* note 114, at 19.

188. Boldizar Nagy, *Speaking Without a Voice*, in FUTURE GENERATIONS AND INTERNATIONAL LAW 51 (Emmanuel Agius & Salvino Busuttil eds., 1998); Michael D. Mastrandrea, and Stephen H. Schneider, *Climate change*, WORLD BOOK ONLINE REFERENCE CENTER (2005), at <www.worldbookonline.com/wb/Article?id=ar226310> (visited Dec. 26, 2006).

be more than offset by decreases in yields caused by drought and higher temperatures – particularly if the amount of warming were more than a few degrees; and 2) yields in the tropics might fall disastrously because temperatures there are already almost as high as many crop plants can tolerate.¹⁸⁹ Because climate change will not merely cause the temperature to rise, but will upset ecological systems and patterns, any “benefit” will be unpredictable and may be offset by an equal or greater harm.

Another concern is that a human rights approach could lead to an anthropocentric perspective of environmental problems, instead of looking at the totality of impacts to species and the environment.¹⁹⁰ Advocates who condemn an anthropocentric approach to environmental problems emphasize the right *of* environment – the notion that the environment possesses rights derived from its own intrinsic value, distinct from human use of the environment. While philosophically noteworthy, this concern has little practical relevance to the problem of climate change.¹⁹¹ If real progress is made on the problem of climate change, how the problem is viewed is somewhat irrelevant. Mitigation measures that deal with climate change will necessarily reverse the overall problem and inevitably benefit humans, other species, and the environment.

Others worry that emphasizing environmental aspects of human rights may divert attention from more important human rights objectives.¹⁹² Characterizing certain climate change impacts as human rights issues might weaken the protection of “real” human rights issues such as genocide and crimes against humanity. There are two responses to this point. First, the diversion of efforts to more so-called important objectives is not a legitimate concern because the consequences of climate change range from quite serious to catastrophic. Second, an approach that utilizes the human rights framework to address climate change would not undermine other environmental and human rights efforts. Instead, a human rights-based approach would aid the development of jurisprudence in both areas by encouraging debate and drawing new linkages between the

189. *Id.*

190. Taylor, *supra* note 104, at 351 (“Some commentators wholly reject human rights proposals, while others offer a compromise position”).

191. *Id.* at 352.

192. See Gunther Handl, *Human Rights and Protection of the Environment: A Mildly ‘Revisionist’ View*, in HUMAN RIGHTS, SUSTAINABLE DEVELOPMENT AND ENVIRONMENT 117 (Antonio Trindade, ed., 1992).

two fields.

Even if a human rights-based approach to climate change litigation is theoretically attractive, it still poses significant legal hurdles. The litigant will lose if he cannot prove that climate change has violated one of his human rights.¹⁹³ The evidentiary standard for the right to life or health would require individuals or communities to establish that their rights were violated by the state's failure to restrict the activities of the polluter. Additionally, determining how to use existing legal categories, who the responsible actors are, and who the victims are that deserve remedies, is a difficult process. These legal hurdles may hurt a human rights-based litigation strategy, fueling criticism about the insufficiency of scientific data and undermining the efficacy of climate change advocacy. However, even if such an approach is not yet possible, reframing climate change in human rights terms is nonetheless valuable in its own right.

Finally, while uncertainty and ambiguity may also pose a problem, most human rights confronted similar hurdles in the early articulation of these rights, particularly economic, social, and cultural rights.¹⁹⁴ These problems also plagued early debates on the right to environment, which has since gained increasing support and legitimacy. The legal field must evolve, and the innovation and pioneering of new legal rights and theories will always suffer from initial skepticism.

VII. Conclusion

Judge Learned Hand once stated that it is reasonable to take precautions if they are less burdensome than the probability that some harm will occur multiplied by the magnitude of that harm.¹⁹⁵ If this is true, then why are the United States and other key nations unwilling to acknowledge the gravity of climate change and take the necessary measures to avoid its potentially catastrophic consequences?¹⁹⁶ Al Gore offers a suggestion: "Are [these key actors] resisting the truth because they know that the moment they

193. Commentators suggest, alternatively, that utilizing a distinct right to a healthy environment may help circumvent the problem of establishing injury. This may be possible in the near future given the increase in scientific certainty on climate change.

194. See Jeffrey J. Rachlinski, *Symposium: Innovations in Environmental Policy: The Psychology of Global Climate Change*, 2000 U. ILL. L. REV. 299 (2000).

195. *Id.*

196. *Id.*

acknowledge it, they will face a moral imperative to act?”¹⁹⁷

By characterizing climate change as a human rights problem, and publicizing the harm already occurring to communities in the Arctic and small island developing states, environmental advocates can highlight the urgency of this issue and confront leaders with Gore’s “moral imperative to act.” A human rights-based approach to climate change, even if used in litigation, will not instantly remedy political stagnation on climate change. However, if such an approach is combined with other efforts, it could jumpstart cooperation and diplomacy on the issue. Just as many nations currently refrain from violating human rights even when doing so is not expeditious, hopefully this century will usher in a global climate change ethic.¹⁹⁸ At the very least, a human rights approach may prompt more serious treatment of the issue of climate change in the United States.

197. AL GORE, AN INCONVENIENT TRUTH: THE PLANETARY EMERGENCY OF GLOBAL WARMING AND WHAT WE CAN DO ABOUT IT back cover (Rodale Books 2006).

198. *Id.*

