

THE PROTECTION OF ENVIRONMENTALLY-DISPLACED PERSONS IN INTERNATIONAL LAW

BY

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“Be worried. Be very worried. Climate change isn’t some vague future problem—it’s already damaging the planet at an alarming pace” warned Time Magazine on its cover of a special report on global warming.¹ One may further add that, as a consequence, environmental degradation is causing a large number of people to flee environments that no longer sustain life.

The issue of environmental degradation is broad and complex. This Article endeavors to better understand one particular aspect, namely the phenomenon of environmentally-induced migration.

The critical issue of environmentally-induced migration has only recently been highlighted by scientists, while subsequently provoking much debate among legal academics. However, the extent to which international law and practice provide the environmentally displaced with physical protection from serious human rights violations unfortunately proves to be very scant. Nevertheless, the particular issue of protecting those environmentally-displaced does not pose any major legal or political difficulties.

For many years the international definition of a refugee has divided scholars. It is now time to refocus the discussion in different terms in order to set forth constructive solutions. In this regard the proposition to adopt a convention dealing specifically with environmentally-induced migration is very praiseworthy.

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¹ Time Inc., *Cover*, TIME, Apr. 3, 2006.

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I. INTRODUCTION

The United Nations (UN) defines "disaster" as "a serious disruption of the functioning of a society, causing widespread human, material, or environmental losses which exceed the ability of affected society to [cope]

using only its own resources.”² Numerous environmental disasters have indiscriminately touched all continents with devastating effects.³ Various political, economic, or social factors can cause environmental disasters, which are far-reaching and inextricably linked to growth and development.⁴ However, history has repeatedly shown that the environment itself can also be a source of disaster.

Over the past forty years, scientists have approached the issue of environmental degradation from different perspectives and with different rules and procedures.⁵ The body of international environmental law sets forth a variety of norms aimed at preventing, reducing, and remedying the multiple aspects of environmental degradation, and environmental degradation ultimately lead to environmental disasters. In contrast, humanitarian law and human rights law consider environmental degradation from an anthropocentric point of view, addressing the adverse effects of environmental degradation on human beings. While migration to escape an environment temporarily or permanently disrupted is a critical aspect of the issue, the current international legal regime disregards the correlation between environmental degradation and human migration.

The importance of the issue of environmentally-induced migration has been highlighted by scientists, which provoked much debate among legal academics. The seminal event in the development of a comprehensive study on the problems related to environmentally-induced migration was a 1985 United Nations Environment Programme paper on environmental refugees.⁶ The expression “environmental refugees,” though widely used for the past twenty years, is mistakenly applied. “In everyday speech, the word ‘refugee’ is used to describe a person who is forced to flee his or her home for any reason for which the individual is not responsible, be it persecution, public disorder, civil war, famine, earthquake or environmental degradation.”⁷

² UNIV. OF WIS. DISASTER MGMT. CTR., AN OVERVIEW OF DISASTER MANAGEMENT 14 (Intertext Training Servs. ed., 2d ed. 1992), *available at* <http://www.undmtp.org/english/Overview/overview.pdf>.

³ For a survey of contemporary disasters, see INT’L FED’N OF RED CROSS & RED CRESCENT SOC’YS, PUBLIC HEALTH GUIDE FOR EMERGENCIES 1-3 to 1-7 (2006) (in collaboration with Johns Hopkins School of Hygiene and Public Health), *available at* http://www.ifrc.org/cgi/pdf_pubshealth.pl?chapter1.pdf.

⁴ ANTHONY H. RICHMOND, THE ENVIRONMENT AND REFUGEES: THEORETICAL AND POLICY ISSUES at 1, 5, U.N. DOC. ST/ESA/SER.N/39, U.N. Sales No. E.95.XIII.17 (1995).

⁵ Neil A.F. Popovic, *Humanitarian Law, Protection of the Environment, and Human Rights*, 8 GEO. INT’L ENVTL. L. REV. 67, 67 (1995).

⁶ ESSAM EL-HINNAWI, ENVIRONMENTAL REFUGEES 4 (1985). A 1984 International Institute for Environment and Development briefing document first introduced the term “environmental refugee.” David Keane, Note, *The Environmental Causes and Consequences of Migration: A Search for the Meaning of “Environmental Refugees,”* 16 GEO. INT’L ENVTL. L. REV. 209, 210 (2004) (citing Kibreab Gaim, *Environmental Causes and Impact of Refugee Movements: A Critique of the Current Debate*, 21 DISASTERS 20 (1997), as arguing that environmental change and concomitant population displacement are the consequences of war and insecurity rather than triggers for it).

⁷ Astri Suhrke, *Global Refugee Movements and Strategies of Response*, in U.S. IMMIGRATION POLICY: GLOBAL AND DOMESTIC ISSUES 157–62 (Mary M. Kritz ed., 1983). “A refugee can be defined in three ways: legally (as stipulated in national or international law); politically (as interpreted to meet political exigencies); and sociologically (as reflecting an empirical reality).”

However, the UN legal definition of a refugee sets forth several specified criteria a person must meet to receive refugee protection.⁸

Some authors affirm that the Convention Relating to the Status of Refugees (Convention) was neither drafted with environmentally-displaced persons in mind, nor can be reasonably interpreted to include those persons.⁹ The use of the term “environmental refugees” is therefore controversial and, even though it seems to provide an impetus for further discussion on the issue, it does not adequately address the dilemma encountered in protecting environmentally displaced individuals.

The World Conference on Human Rights, held in Vienna in June 1993, acknowledged the substantial problem of large movements of population due to environmental degradation, as well as the actual inadequacy of international refugee law to tackle the problem.¹⁰ Yet the Vienna Declaration and Programme of Action issued at the conference does not offer any guidance or strategy to deal with the complexity of these population movements.¹¹ Nor do the symposiums later convened under the auspices of the UN, in order to foster discussion on both the issue of environmentally-induced population displacements and environmental impacts resulting from mass migrations, address the problem.

This Article focuses on the extent to which international law and practice provide the environmentally displaced with physical protection from serious human rights violations. Accordingly, it endeavours to better understand the phenomenon of environmentally-induced migration in order to foster constructive discussion on the issue.

First, the Article illustrates the correlation between environmental degradation and migration, providing examples of environmentally-induced population movements. The Article further highlights the importance of the issue, reasserting scientists’ concerns over an aggravation of the problem in the near future. This is followed by a discussion of the legal means of protection available in international law. Finally, discussing the maelstrom stemming from the notion of “environmental refugees,” this Article analyzes various propositions advanced by legal scholars to foster protection for those environmentally displaced who do not fit neatly within the refugee definition, but deserve international protection nonetheless.

Id.

⁸ 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 (entered into force Apr. 22, 1954) *amended by* Protocol Relating to the Status of Refugees, art. 1 ¶ 2, Jan. 31, 1967, 19 U.S.T. 6223, 6225, 606 U.N.T.S. 267, 268 (entered into force Oct. 4, 1967) [hereinafter 1951 Refugee Convention; 1967 Refugee Protocol].

⁹ Gregory S. McCue, *Environmental Refugees: Applying International Environmental Law to Involuntary Migration*, 6 GEO. INT’L ENVTL. L. REV. 151, 152 (1993); Dana Zartner Falstrom, *Stemming the Flow of Environmental Displacement: Creating a Convention to Protect Persons and Preserve the Environment*, 13 COLO. J. INT’L ENVTL. L. & POL’Y 1, 15 (2001 Yearbook, 2002); Keane, *supra* note 6, at 215.

¹⁰ World Conference on Human Rights, June 14–25, 1993, *Vienna Declaration and Programme of Action*, ¶ 23, U.N. Doc A/CONF.157/23 (June 25, 1993), *available at* <http://www.ohchr.org/english/law/pdf/vienna.pdf>; *see also id.* ¶¶ 23–38 (calling on countries to work together to solve the problem).

¹¹ *Id.* ¶¶ 23–38.

II. THE STRIKING EVIDENCE THAT ENVIRONMENTAL CHANGE CAUSES LARGE HUMAN MIGRATIONS

Of the various forms of environmental degradation, some particular incidents are of major concern as they make natural habitats unliveable either temporarily or permanently and accordingly trigger large human migrations. These environmental disasters are traditionally classified into four categories:¹² 1) long-term environmental degradation, including global warming, deforestation, land erosion, salinity, siltation, waterlogging, and desertification,¹³ 2) sudden natural environmental disruptions, including earthquakes, droughts, floods, hurricanes, monsoons, tidal waves, tornadoes, and volcanic eruptions,¹⁴ 3) accidents, including both industrial and chemical disasters,¹⁵ and 4) armed conflicts.¹⁶

Features of environmental disasters are extensively described in both scientific and legal literature. This Article reviews several well-known examples of environmentally-induced migration for the purpose of discussing the consequences in terms of human rights violations. These examples illustrate the magnitude of the phenomenon and highlight the subsequent need to provide protection to those who are environmentally displaced. There is an inextricable correlation between long-term environmental degradation and sudden natural environmental disruptions, the former exacerbating the pace as well as the adverse effects of the latter.¹⁷ Thus, these forms of environmental disasters are usually surveyed concurrently in the literature.

¹² Int'l Org. for Migration, Migration and the Environment 22 (1992) (unpublished paper, on file with the Refugee Policy Group); see Steve Lonergan, *Environmental Degradation in Population Displacement*, ENVTL. CHANGE & SECURITY PROJECT REP. 5, 9 (Spring 1998), available at <http://www.wilsoncenter.org/topics/pubs/ACF26C.pdf>; Jessica Cooper, Note, *Environmental Refugees: Meeting the Requirements of the Refugee Definition*, 6 N.Y.U. ENVTL. L.J. 480, 503 (1998); Suzette Brooks Masters, *Environmentally Induced Migration: Beyond a Culture of Reaction*, 14 GEO. IMMIGR. L.J. 855, 863 (2000). Masters provides a table listing the various environmental causes of migration and the subsequent average number of migrants annually. *Id.* She specifies that the precise estimates of the numbers of persons displaced for environmental reasons are unavailable, yet the literature provides a rough sense of scale. *Id.* at 862.

¹³ McCue, *supra* note 9, at 158.

¹⁴ *Id.* at 160.

¹⁵ *Id.* at 162.

¹⁶ For an exhaustive survey of environmental damage resulting from armed conflicts, see JAY E. AUSTIN & CARL E. BRUCH, *THE ENVIRONMENTAL CONSEQUENCES OF WAR: LEGAL, ECONOMIC, AND SCIENTIFIC PERSPECTIVES* (2000); see also Jeremy Leggett, *The Environmental Impact of War: a Scientific Analysis and Greenpeace's Reaction*, in ENVIRONMENTAL PROTECTION AND THE LAW OF WAR: A "FIFTH GENEVA" CONVENTION ON THE PROTECTION OF THE ENVIRONMENT IN TIME OF ARMED CONFLICT 68, 68-77 (Glen Plant ed., 1992) (discussing international law relevant to environmental protection in time of war and armed conflict); Tara Weinstein, *Prosecuting Attacks that Destroy the Environment: Environmental Crimes or Humanitarian Atrocities?*, 17 GEO. INT'L ENVTL. L. REV. 697, 698 (2005) (highlighting that the environment is not only a method of warfare but also systematically a casualty of armed conflicts).

¹⁷ Cooper, *supra* note 12, at 503 (citing Jodi L. Jacobson, *Environmental Refugees: A Yardstick of Habitability* 20 (World Watch Institute, Working Paper No. 86, 1988); ANDERS WJMKMAN & LLOYD TIMBERLAKE, *NATURAL DISASTERS: ACTS OF GOD OR ACTS OF MAN?* 21-22 (1984)).

*A. Long-Term Environmental Degradation and Sudden Natural
Environmental Disruptions*

The link between long-term environmental degradation and the subsequent movement of population is best illustrated by the desertification of the African Sahel.¹⁸ Norman Myers asserts that desertification threatens at least 900 million people around the world and that severe desertification threatens 135 million of them, half of that 135 million being found in Sahel.¹⁹ The African Sahel is a belt of semi-arid land running across the southern boundary of the Sahara desert, from Mauritania to Somalia.²⁰ The desertification in the African Sahel may be explained by the continual population growth in the region, which increased undue exploitation of environmental resources until it surpassed thresholds of irreversible depletion and was no longer able to retain adequate moisture and rainwater.²¹

Either as a result of these manmade conditions or otherwise caused environmental impairments, the Sahel is affected by recurrent drought. During the periods of drought, "the nomadic farmers of the Sahel moved further and further southward, away from the desert, in search of less sparse areas, stripping the land bare as they went."²² Similarly, subsistence farmers were forced to move onto fragile land, further overworking the soil and exacerbating the problem.²³ Eventually, this combination of land degradation and drought resulted in the rapid southward expansion of the Sahara²⁴ so that today the African Sahel is experiencing desertification at an alarming pace.²⁵ Jessica Cooper observes that the environmental conditions of the Sahel have become intolerable for its human inhabitants—land degradation has become so significant and widespread that, together with droughts, it is the prime reason why millions of sub-Saharan people have faced an almost constant threat of famine and starvation since 1985.²⁶

For these reasons, hundreds of thousands of Sahel Africans have fled in search of an environment that can sustain them. Jessica Cooper reports that the Ivory Coast absorbed 1.4 million Sahelian refugees during the first drought that touched the Sahel, between 1968 and 1973.²⁷ "During the 1980's [sic] drought, twenty percent of Mauritania's population, or 400,000 people,

¹⁸ Cooper, *supra* note 12, at 504–06.

¹⁹ NORMAN MYERS & JENNIFER KENT, ENVIRONMENTAL EXODUS: AN EMERGENT CRISIS IN THE GLOBAL ARENA 39, 74 (1995).

²⁰ Cooper, *supra* note 12, at 504; McCue, *supra* note 9, at 159; MYERS & KENT, *supra* note 19, at 74.

²¹ MYERS & KENT, *supra* note 19, at 54; WILKMAN & TIMBERLAKE, *supra* note 17, at 35–36.

²² Cooper, *supra* note 12, at 504–05.

²³ *Id.* at 505; McCue, *supra* note 9, at 159.

²⁴ Sadruddin Aga Khan, *Preface* to WILKMAN & TIMBERLAKE, *supra* note 17, at 9.

²⁵ WILKMAN & TIMBERLAKE, *supra* note 17, at 38.

²⁶ Cooper, *supra* note 12, at 505 (citing MYERS & KENT, *supra* note 19, at 68); Jacobson, *supra* note 17, at 6. As Jacobson put it, "desertification . . . has repeatedly damaged millions of hectares of once productive land and made refugees out of millions of sub-Saharan African farmers. Migration is the signal that land degradation has reached its sorry end." *Id.*

²⁷ Cooper, *supra* note 12, at 506 (citing MYERS & KENT, *supra* note 19, at 74).

and seventeen percent of Niger's population, or almost 1.5 million people, became environmental refugees. It is estimated that ten million people in the Sahel were forced off their land in that decade."²⁸ Thus it is argued that the "Sahel has generated some of the largest numbers of environmental refugees in proportion to its total population."²⁹

Looming behind examinations of individual localities such as the Sahel is the potential for displacement due to global warming.³⁰ For the past fifty years, scientists have observed and warned the international community of a modification in the composition of the Earth's atmosphere fostering a rise of temperature.³¹ The phenomenon, known as global warming or the greenhouse effect, is the consequence of human activities, in particular, large scale burning of fossil fuels and destruction of forests.³² This has resulted in the release of excessive amounts of carbon dioxide and other gases into the air.³³ The scientists predict that average global temperatures will rise between three and eight degrees Fahrenheit over the next sixty years, and have observed that the Earth has not experienced such a change in climate for the past 10,000 years.³⁴

The consequences of global warming on human migration are distressing since areas particularly vulnerable to natural disasters will face an increase in the occurrence and severity of sudden natural environmental disruption.³⁵ However, the phenomenon that may trigger the most important

²⁸ Cooper, *supra* note 12, at 506–07 (citing MYERS & KENT, *supra* note 19, at 74).

²⁹ Cooper, *supra* note 12, at 507 (citing MYERS & KENT, *supra* note 19, at 74).

³⁰ NORMAN MYERS, *ULTIMATE SECURITY: THE ENVIRONMENTAL BASIS OF POLITICAL STABILITY* 190 (1993).

³¹ See Sara C. Aminzadeh, *A Moral Imperative: The Human Rights Implications of Climate Change*, 30 HASTINGS INT'L & COMP. L. REV. 231, 231 (2007).

³² JENNY TESAR, *OUR FRAGILE PLANET: GLOBAL WARMING* 27–29, 81 (1991); see also INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, *CLIMATE CHANGE 2007: THE PHYSICAL SCIENCE BASIS* 2–3 (Feb. 2007), available at <http://www.ipcc.ch/SPM2feb07.pdf>.

³³ TESAR, *supra* note 32, at 6 (explaining that countless aspects of human society contribute to global warming, including "driving cars, running air conditioners, raising cattle, cutting down forests, turning on lights, making computers, operating steel mills, growing rice, baking pies, flying airplanes, burning wood, manufacturing soda cans, ironing clothes, making ice cubes—the list goes on and on."). Yet, the burning of fossil fuels and the destruction of forests are major sources of carbon dioxide. *Id.* at 27–29, 81.

³⁴ *Id.* at 6. Climatic variation is a natural phenomenon. Climatic changes are, however, more alarming. Indeed, since the mid-19th century, the date from which temperatures have been collected in a reliable and systematic fashion, scientists have observed that the average world temperature has increased to reach its highest warmth at the dawn of the 21st century. Elizabeth Kolbert, *The Climate of Man—II*, THE NEW YORKER, May 2, 2005, at 64. Furthermore, the study of ice blocks in the Antarctic has enabled scientists to establish complete data of the earth's temperature and the atmosphere's composition for the last four glacial periods (scientists calculate temperature from the ice composition and reconstitute the atmosphere composition by analyzing the tiny bubbles captured inside). *Id.* This data shows that for the last 420,000 years the earth's temperature has never been as warm as it is now. *Id.* For further discussion of global climate change, see generally John Houghton, *Climate Change Calls for Action Now*, 6 SOC'Y OF CHEMICAL INDUSTRY 232 (1996).

³⁵ See generally MYERS, *supra* note 30, at 189–203 (describing the current and possible future problem of environmental refugees).

number of migrants is the rise in sea level.³⁶ Considering the fact that one-third of the world's current population lives within sixty kilometers of a coastline and that the global population is increasing, the rise in sea level will have devastating implications.³⁷ Jessica Cooper illustrates the extent of the problem with the example of countries such as Egypt, India, Bangladesh, and China "where large populations reside on low-lying deltas [such that] a three foot rise in sea level could turn hundreds of millions of people into environmental refugees."³⁸ "Island nations in the Caribbean, the Mediterranean, and the Pacific are equally at risk. With a rise in sea level, inhabitants of these islands could find themselves entirely inundated, resulting in an additional twenty-five million people seeking refuge."³⁹ Norman Myers posits that, as a consequence, fifty million people could be forced to migrate within the next fifty years.⁴⁰

Recently, the international community has been particularly concerned about the fate of the inhabitants of Tuvalu Island, an island nation located in the Pacific Ocean halfway between Hawaii and Australia, threatened by sea level rise.⁴¹ Realizing that "the people of Tuvalu will soon have to follow their island to a salty demise or move to higher ground," the Prime Minister has requested environmental refugee status for its citizens from both Australia and New Zealand.⁴² New Zealand has responded to the plea by allowing seventy-five Tuvaluans to relocate annually to their country, but Australia has made no such offer.⁴³ With New Zealand's allowance of seventy-five Tuvaluans a year, it would theoretically take 140 years to

³⁶ MYERS, *supra* note 30, at 189 (noting that the Intergovernmental Panel on Climate Change 1990 stated that "[t]he gravest effects of climate change may be those on human migration as millions are uprooted by shoreline erosion, coastal flooding, and agricultural disruption"); *see also* Robert J. Nicholls & Stephen P. Leatherman, *Global Sea-Level Rise, in* AS CLIMATE CHANGES: INTERNATIONAL IMPACTS AND IMPLICATIONS 92 (Kenneth M. Strzepek & Joel B. Smith eds., 1996).

³⁷ Cooper, *supra* note 12, at 509.

³⁸ *Id.*

³⁹ *Id.* at 510. *See generally* Alexander Gillepsie, *Small Island States in the Face of Climatic Change: The End of the Line in International Environmental Responsibility*, 22 UCLA J. ENVTL. L. & POL'Y 107, 107-29 (2004) (noting the impacts of climate change on small island states); Samuel Pyeatt Menefee, *"Half Seas Over": The Impact of Sea Level Rise on International Law and Policy*, 9 UCLA J. ENVTL. L. & POL'Y 175, 175-218 (1991) (describing the possibility of and anticipated effects of sea-level rise due to climate change); Paul Lewis, *Island Nations Fear a Rise in the Sea: Higher CO2 Could Leave Some Nations Awash*, N.Y. TIMES, Feb. 17, 1992, at A3 (describing current and possible future effects of sea-level rise on island nations); PAUL KENNEDY, *PREPARING FOR THE 21ST CENTURY* 109-10, 176 (1993) (discussing the risk to island nations in the Pacific); MYERS, *supra* note 30, at 198 (noting the vulnerabilities of island states to sea-level rise).

⁴⁰ MYERS, *supra* note 30, at 195.

⁴¹ Anna Gosline, *Where Will They Go When the Sea Rises?*, NEW SCIENTIST, May 7, 2005, at 8-9; *see also* Rebecca Elizabeth Jacobs, *Treading Deep Waters: Substantive Law Issues in Tuvalu's Threat to Sue the United States in the International Court of Justice*, 14 PAC. RIM L. & POL'Y J., 103, 106 (2005) (explaining scientists' prediction that rising sea levels will threaten the existence of Tuvalu).

⁴² Jacobs, *supra* note 39, at 107.

⁴³ *Id.*

relocate the Tuvalu population. Scientists hypothesize, however, that the island will be completely submerged in ninety years time.⁴⁴

B. Accidents, Including Industrial and Chemical Disasters

Industrial and chemical disasters result from activities that lead to pollution, spillage of hazardous materials, explosions, and fires. They may occur because of poor construction and management planning, or from neglect of safety procedures.⁴⁵ There are several examples of industrial and chemical accidents causing large numbers of persons to be displaced. In 1984, a chemical plant located in Bhopal, India, owned by Union Carbide,⁴⁶ released chemicals into the city, displacing 200,000 people.⁴⁷ A similar accident occurred in Seveso, Italy, where a small chemical manufacturing facility released dioxin, the same chemical found in Agent Orange,⁴⁸ and displaced 800 people.⁴⁹ In 1976, a partial meltdown of a nuclear reactor at Three Mile Island, located in Pennsylvania, caused the temporary displacement of over 100,000 families⁵⁰ and the permanent displacement of 10,000 individuals.⁵¹ However, the nuclear accident at Chernobyl is the most infamous example.⁵² Overall, up to 100,000 people were displaced, a thirty-mile zone around Chernobyl remains uninhabited, and "radiation contamination has a half-life of 25,000 years, so the area will be effectively contaminated forever."⁵³ The geographic scope of such accidents is nonetheless limited, so that, in general, displaced persons may seek refuge within the borders of the country in which the accident occurred.

C. The Aftermath of Armed Conflicts

Certainly the issue of environmental degradation in times of armed conflict is contextual and less generalized than the "regular and sustained assault on the environment that is an endemic part of any industrial society."⁵⁴ Yet, recent materials describe the environmental impacts of

⁴⁴ *Id.*

⁴⁵ W. COURTLAND ROBINSON, RISKS AND RIGHTS: THE CAUSES, CONSEQUENCES, AND CHALLENGES OF DEVELOPMENT-INDUCED DISPLACEMENT 9 (2003), available at [http://www.reliefweb.int/rw/lib.nsf/db900SID/LGEL-5NEKS5/\\$FILE/brookings-dev-may03.pdf?OpenElement](http://www.reliefweb.int/rw/lib.nsf/db900SID/LGEL-5NEKS5/$FILE/brookings-dev-may03.pdf?OpenElement).

⁴⁶ McCue, *supra* note 9, at 163.

⁴⁷ Keane, *supra* note 6, at 212.

⁴⁸ See Richard Jackson et al., *Will Biomonitoring Change How We Regulate Toxic Chemicals?*, 30 J.L. MED. & ETHICS, 177, 181 (Special Supplement 2002) (comparing the levels of dioxin between individuals exposed to Agent Orange during spraying in Vietnam and individuals exposed during the 1976 accident in Seveso, Italy).

⁴⁹ Tracey King, Note, *Environmental Displacement: Coordinating Efforts to Find Solutions*, 18 GEO. INT'L ENVTL. L. REV. 543, 550 (2006).

⁵⁰ McCue, *supra* note 9, at 162.

⁵¹ Keane, *supra* note 6, at 212.

⁵² EBEL ROBERT, CHERNOBYL AND ITS AFTERMATH, at ix (1994).

⁵³ Keane, *supra* note 6, at 212-13; see ROBERT, *supra* note 48, at 2.

⁵⁴ Lakshman Guruswamy, *The Environmental Consequences of War: Legal, Economic, and Scientific Perspectives*, 14 COLO. J. INT'L ENVTL. L. & POL'Y YEARBOOK 111, 112 (2003). On the

armed conflicts⁵⁵ generally fit them into one of three categories: 1) destruction of the environment for deliberate military purposes, 2) destruction of the environment for economic purposes (often involving natural resources), or 3) collateral damage.⁵⁶

Tara Weinstein illustrates that history abounds with examples, widespread throughout Asia, Europe, and North America, of purposeful modification of the environment as a tool of war.⁵⁷ In 512 B.C., the Scythians practiced a scorched-earth policy against the Persians.⁵⁸ She further enumerates the

salting of the soils of Carthage; the scorching of Confederate land in the U.S. civil war; the blowing-up of the Huayuankow Dam of the Yellow River by the Chinese, which flooded millions of acres of crops and soil; the destruction of Verdun by poison gas in World War I; and the burning of Norwegian lands during World War II.⁵⁹

More recently, the United States used Agent Orange to defoliate the jungles of Vietnam.⁶⁰ "The old Iraqi government ignited oil fields in Kuwait during the 1990–1991 Gulf War" and destroyed the marshes in southern Iraq following the 1991 Shi'a rebellion.⁶¹ During the 1999 Kosovo war, the North Atlantic Treaty Organization (NATO) bombings allegedly damaged the

contemporary issue of development-induced migration, which affects more particularly developing countries, see ROBINSON, *supra* note 41, at 10–11 ("Not only is development-induced displacement a widespread, and growing, phenomenon, but evidence suggests that while the beneficiaries of development are numerous, the costs are being borne disproportionately by the poorest and most marginalized populations."). See also Michael Cernea, *Risks, Safeguards and Reconstruction: A Model for Population Displacement and Resettlement*, in RISKS AND RECONSTRUCTION: EXPERIENCES OF SETTLERS AND REFUGEES 11, 11–56 (M. Cernea & C. McDowell eds., 2000) (discussing forced population displacements).

⁵⁵ See, e.g., Neil A.F. Popovic, *In Pursuit of Environmental Human Rights: Commentary on the Draft Declaration of Principles on Human Rights and the Environment*, 27 COLUM. HUM. RTS. L. REV. 487 (1996).

⁵⁶ Popovic, *supra* note 5, at 68–69.

⁵⁷ Weinstein, *supra* note 16, at 516–521.

⁵⁸ *Id.* at 700; Marc A. Ross, *Environmental Warfare and the Persian Gulf War: Possible Remedies to Combat Intentional Destruction of the Environment*, 10 DICK. J. INT'L L. 515, 516 (1992).

⁵⁹ Weinstein, *supra* note 16, at 700.

⁶⁰ AUSTIN & BRUCH, *supra* note 16, at 1–2; Mark A. Drumbl, *Waging War Against the World: The Need to Move from War Crimes to Environmental Crimes*, 22 FORDHAM INT'L L.J., 122, 123 (1998). Mark Drumbl cites Oscar Arias, *Responsibility of Nations to the Environment*, in PROCEDURES OF THE FIRST INTERNATIONAL CONFERENCE ON ADDRESSING ENVIRONMENTAL CONSEQUENCES OF WAR: LEGAL, ECONOMIC, AND SCIENTIFIC PERSPECTIVES (June 10–12, 1998) and affirms that "it is estimated that one-third of Vietnam is wasteland as a result of extensive defoliation practices." See also Ross, *supra* note 51, at 518 (explaining the U.S. strategy during the Vietnam War, which included "chemical and mechanical deforestation").

⁶¹ Weinstein, *supra* note 16, at 700; see also Drumbl, *supra* note 53, at 123 (referring to the Public Authority for Assessment of Compensation of Damages Resulting from Iraqi Aggression, Oil, and Environmental Claims Bulletin (Aug. 1997) and alleging that "[i]ndependent of the damage to Kuwait and to the Persian Gulf waters, it is estimated that the oil well fires set by Iraqi soldiers expelled one to two million tons of carbon dioxide, which in 1991 represented one percent of total global carbon dioxide emissions").

environment.⁶² This list is likely to expand if the international community does not take meaningful steps to address the issue of environmental destruction in times of armed conflict.

Destruction of the environment for economic purposes (often involving natural resources) has also been a problem. Several times in the last few years, the UN Security Council has alleged and condemned the plunder of Democratic Republic of Congo's natural resources, emphasizing the concerns of the international community that the illegal exploitation of natural resources is fuelling the conflict.⁶³

Collateral damage has also occurred. For instance, Robert Augst reports that the coalition used cluster bombs in the recent war in Afghanistan. Some of these bombs did not explode on impact and scattered. Since they are sometimes undetectable to the population, they can impact the use of farmland and livestock, "impede access to shelter and water, and delay rehabilitation of essential infrastructure."⁶⁴ Sadly, Cambodia is similarly infamous for the large and widespread amount of landmines left after withdrawal of its armed forces, and the subsequent consequences on everyday conditions of life as illustrated above.⁶⁵ Importantly, as a result, there are a large number of injured people. More recently, as a consequence of the Rwandan war, national parks were left polluted with landmines and bodies, "endangered species such as the mountain gorillas [were] poached; agricultural lands rendered barren in order to coerce the migration of persecuted peoples; and systemic resettlement exhausted moderate lands, specifically in Eastern Congo, of their agricultural capacities."⁶⁶

As a matter of course, therefore, environmental degradation in times of armed conflict irremediably fosters large movements of population. As a result, Norman Myers observes that "[a]lthough it is difficult to calculate the exact number of people for whom environmental degradation is a primary cause of forced migration, it assuredly is a factor for the majority of non-

⁶² Final Report to the Prosecutor by the Committee Established to Review the NATO Bombing Campaign Against the Federal Republic of Yugoslavia 14–25, <http://www.un.org/icty/pressreal/nato061300.htm> (last visited Apr. 15, 2007); see also Natalino Ronzitti, *Is the Non Liquef of the Final Report by the Committee Established to Review the NATO Bombing Campaign Against the Federal Republic of Yugoslavia Acceptable?*, 840 INT'L REV. OF THE RED CROSS 1017, 1017–28 (2000), available at <http://www.icrc.org/Web/Eng/siteeng0.nsf/html/57JQTC>; Thilo Marauhn, *Environmental Damage in Times of Armed Conflict—Not "Really" a Matter of Criminal Responsibility?*, 840 INT'L REV. OF THE RED CROSS 1029, 1029–36 (2000), available at <http://www.icrc.org/Web/Eng/siteeng0.nsf/html/57JQTB>.

⁶³ S.C. Res. 1457, U.N. Doc. S/RES/1457 (Jan. 24, 2003); see also Press Release, Security Council, Security Council Condemns Plunder of Democratic Republic of Congo's Resources, Requests New Six-Month Mandate for Investigative Panel, U.N. Doc. SC/7642 (Jan. 24, 2003), available at <http://www.un.org/News/Press/docs/2003/sc7642.doc.htm> (announcing the adoption of Resolution 1457).

⁶⁴ Robert Augst, Note, *Environmental Damage Resulting from Operation Enduring Freedom: Violations of International Law?*, 33 ENVTL. L. REP. NEWS & ANALYSIS 10,668, 10,668 (2003).

⁶⁵ Barry Wain, *A Year After U.N. Elections, Cambodia Continues Painful Road to Recovery*, WALL ST. J., Oct. 21, 1994, at A9.

⁶⁶ Drumb, *supra* note 53, at 145.

traditional refugee-seekers.”⁶⁷ Thus, while there are presently 22 million traditional refugees, there are presumably an additional 25 million environmental refugees.⁶⁸ Moreover, it is predicted that the number of persons who will flee environmental degradation in the near future is going to increase at a rapid pace, so that the issue of environmental refugees promises to rank as “one of the foremost human crises of our times.”⁶⁹

D. Environmentally-Induced Migration Controversy

Some authors challenge the factual evidence showing that environmental degradation causes large human migrations. Principally, Richard Black questions the sources and methods providing the statistical number of environmentally-induced migrants.⁷⁰ He disputes the argument that the flow of migration has increased due to the impairment of the environment, stating that the phenomenon is not unique to modern times, nor should it be a cause for concern.⁷¹ Moreover, he affirms that the causes of forced migration are so complex and multiple that they cannot be circumscribed solely to environmental reasons.⁷² For this reason some scholars opine that the key problem is perhaps not environmental change itself, but the ability of different communities and countries to cope with it. This, in turn, is closely linked to problems of underdevelopment and North-South relations.⁷³

Authors may rightly highlight the complexity of migration phenomena and challenge the exact number of environmentally-induced migrants. Large groups of persons are nonetheless in a vulnerable situation and deserve protection. Moreover, the current international legal regime does not address specifically the issue of environmentally-displaced persons. Indeed, even though debate on the issue emerged twenty years ago when Essam El-Hinnawi referred to the term “environmental refugees,”⁷⁴ legal academics are still in search of an appropriate means of protection.

⁶⁷ Cooper, *supra* note 12, at 483–84 n.18 (summarizing MYERS & KENT, *supra* note 19, at 14)

⁶⁸ Norman Myers, *Environmental Refugees*, 19 POPULATION & ENV'T.: J. INTERDISCIPLINARY STUD. 167, 167 (Nov. 1997); Cooper, *supra* note 12, at 484–85.

⁶⁹ Myers, *supra* note 61, at 175.

⁷⁰ Richard Black, *Environmental Refugees: Myth or Reality?* 2–3 (United Nations High Comm'r for Refugees, Working Paper No. 34, 2001).

⁷¹ *Id.* at 5; see also Hellden Ulf, *Desertification—Time for an Assessment?*, 20 AMBIO 372–83 (1991) (questioning whether the Sahel of Africa is actually experiencing desertification, and calling for more scientific assessment); DAVID THOMAS & NICK MIDDLETON, *DESERTIFICATION: EXPLODING THE MYTH* 1–145 (1994) (attempting to “unravel the major confusions and doubts related to desertification”); Jeremy Swift, *Desertification: Narratives, Winners and Losers, in THE LIE OF THE LAND: CHALLENGING RECEIVED WISDOM ON THE AFRICAN ENVIRONMENT* 73, 73–90 (Melissa Leach & Robin Mearns eds., 1996) (documenting the history of the concept of desertification).

⁷² Black, *supra* note 63, at 2 (discussing Thomas Homer-Dixon, *Environmental Scarcities and Violent Conflicts: Evidence from Cases*, 19 INT'L SEC. 22 (1994)).

⁷³ Stephen Castles, *Environmental Change and Forced Migration: Making Sense of the Debate* 3 (United Nations High Comm'r for Refugees, Working Paper No. 70, 2002).

⁷⁴ EL-HINNAWI, *supra* note 6, at 4.

The next Part focuses on the argument to reinterpret or revise the refugee definition to include environmentally-displaced persons. Reference to the term “environmental refugees” has, however, been the object of significant discussions and remains controversial.

III. THE MAELSTROM STEMMING FROM THE NOTION OF “ENVIRONMENTAL REFUGEE”

According to the Refugee Convention,

the term “refugee” shall apply to any person who . . . owing to 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; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it.⁷⁵

This Article discusses each of the elements of the refugee definition with respect to environmentally-displaced persons. An analysis of the present legal definition of “refugee” highlights the legal hurdles presented when attempting to adapt the situation of environmentally-displaced persons to fit the refugee definition.

A. The Blunt, Well-Founded Fear of Persecution of Environmentally-Displaced Persons

Most authors concur that in the vast majority of situations neither persecution nor concerted state action is involved, so that “unlike victims of persecution, those fleeing environmental disaster can, in most cases, turn to their own government for help and support.”⁷⁶ The Office of the United Nations High Commissioner on Refugees (UNHCR) makes this distinction by stating that:

[r]efugees are distinguished by the fact that they lack the protection of their state and therefore look to the international community to provide them with security. Environmentally-displaced people, on the other hand, can usually count upon the protection of their State, even if it is limited in its capacity to provide them with emergency relief or longer-term reconstruction assistance.⁷⁷

⁷⁵ 1951 Refugee Convention, *supra* note 8, art. 1.

⁷⁶ Christopher Kozoll, *Poisoning the Well: Persecution, the Environment, and Refugee Status*, 15 COLO. J. INT'L ENVTL. L. & POL'Y 271, 272 (2004); *see also* Masters, *supra* note 12, at 866 (noting that many argue for a more expansive definition of “refugee”—one which will include “environmental refugee[s]”); Falstrom, *supra* note 9, at 13 (stating that “even if the government did not regulate a nuclear plant or did not prevent soil erosion from occurring, these are not actions that rise to the level of persecution”).

⁷⁷ U.N. HIGH COMM'R FOR REFUGEES, THE STATE OF THE WORLD'S REFUGEES: A HUMANITARIAN

Nevertheless, Christopher Kozoll rightly points out that “[n]othing in either international or national standards explicitly disavows the idea that one may be persecuted through environmental harm.”⁷⁸ Therefore, at least some of the world’s environmentally-displaced persons probably already fall within the settled meanings of refugee. Such people are entitled to recognition of their status as refugees and should be able to claim any international protections available to recognized refugees.

The Handbook on Procedures and Criteria for Determining Refugee Status (Handbook), which is undoubtedly the most authoritative interpretation of the 1951 Refugee Convention and the 1967 Refugee Protocol, affirms that “[t]here is no universally accepted definition of ‘persecution,’ and various attempts to formulate such a definition have [been] met with little success.”⁷⁹ As B.S. Chimni further explains, “[i]t is widely accepted that the drafters of the Convention deliberately left the meaning of ‘persecution’ undefined as it was an impossible task to enumerate in advance the myriad forms it might assume.”⁸⁰ Certainly, therefore, environmental harm may be considered as persecutory according to the provisions of the Handbook.⁸¹

Persecution is “an act of government against individuals.”⁸² In other words, in order to be recognized as a refugee because of environmental impairment, one must establish that the adverse consequences on the environment are due to governmental actions. Environmental disruption is not, however, always caused by human activities. In such circumstances, it is impossible to affirm that people are fleeing persecution. In this regard, the Handbook explicitly rules out victims of famine or natural disaster, unless they also have a well-founded fear of persecution for one of the reasons stated.⁸³ In addition, the Handbook does not prevent victims of human-made

AGENDA, box 1.2 (1997), *available at* <http://www.unhcr.org/publ/3eef1d896.html>.

⁷⁸ Kozoll, *supra* note 69, at 274.

⁷⁹ United Nations High Comm’r for Refugees, Handbook on Procedures and Criteria for Determining Refugee Status Under the 1951 Convention and the 1967 Protocol Relating to the Status of Refugees, ch. II.B.(2)(b), U.N. Doc. HCR/1P/4/Eng. Rev. 1 (1979) (reedited Jan. 1992) [hereinafter Handbook on Procedures and Criteria for Determining Refugee Status], *available at* <http://www.unhcr.org/publ/PUBL/3d58e13b4.pdf>; *see* Jeanhee Hong, *Refugees of the 21st Century: Environmental Injustice*, 10 CORNELL J.L. & PUB. POL’Y 323, 338 (2001).

⁸⁰ B.S. CHIMNI, INTERNATIONAL REFUGEE LAW 5 (2000).

⁸¹ *See* Handbook on Procedures and Criteria for Determining Refugee Status, *supra* note 79, ch. II.B.(2)(b) (noting that there is no single definition of “persecution” and that attempting to define the term has been unsuccessful).

⁸² Suhrke, *supra* note 7, at 157–59.

⁸³ Handbook on Procedures and Criteria for Determining Refugee Status, *supra* note 72, at 9; *see also* Hong, *supra* note 72, at 331 (asserting that “a leading study of the time, conducted at the request of the UNHCR, explicitly stated that the Convention’s definition excludes victims of natural disasters from acquiring refugee status. According to this source, the events that cause displacement must ‘derive from the relations between the State and its nationals’”). She further explains that

Jacques Vernant, invited in 1951 by the UNHCR to conduct an independent and scientific survey of the refugee situation at the time, described the definition of refugee in international law as consisting of two elements: 1) persons qualifying for refugee status

environmental impairment from receiving refugee status. To the contrary, “the fact that the direct harm inflicted is on the environment rather than on the individual should not change the fact that such harm is persecution.”⁸⁴ Indeed, a serious environmental crisis will certainly threaten the health, life, or freedom of persons and accordingly amount to persecution.⁸⁵ Christopher Kozoll affirms therefore that “[e]nvironmental harm is as capable of being a means of persecution as any other form of harm.”⁸⁶

Jessica Cooper emphasizes that governments are involved in most cases of environmental disaster⁸⁷ and argues that, whether the environment is depredated because of negligent decision making or because of decisions intentionally sacrificing the environment of a region for the benefit of national economic interests, government-induced environmental degradation is a form of persecution.⁸⁸ She concludes that “[w]ith governments playing so pertinent a role in the occurrence of environmental crises, refugees seeking refuge from the resulting environmental degradation are effectively seeking refuge from their governments as well.”⁸⁹ Nonetheless, this argument is too simplistic since the refugee definition requires further qualitative elements for the governmental action or inaction to be persecutory under the terms of the 1951 Refugee Convention.⁹⁰

[that] must have left the territory of the State of which they were nationals, and 2) the root-causes of a person's displacement must be of a political nature and “accompanied by persecution or the threat of persecution against himself or at least against a section of the population with which he identifies himself.”

Id. at 331 n.54. Vernant concluded that the second condition “excludes victims of natural disasters from the definition of the refugee known to international law.” JACQUES VERNANT, *THE REFUGEE IN THE POST-WAR WORLD* 4–7 (1953).

⁸⁴ Kozoll, *supra* note 69, at 273.

⁸⁵ See Handbook on Procedures and Criteria for Determining Refugee Status, *supra* note 79, at 51 (stating that serious violations of human rights based on “a threat to life or freedom on account of race, religion, nationality, political opinion or membership of a particular social group” would constitute persecution).

⁸⁶ Kozoll, *supra* note 69, at 297. He refers to *Sarei v. Rio Tinto*, 221 F. Supp. 2d 1116 (C.D. Cal. 2002), and observes that the allegations present an example of how individuals might suffer persecution through harm inflicted by environmental damage, although the plaintiffs did not raise the issue. Kozoll, *supra* note 69, at 299.

⁸⁷ This argument is corroborated by different studies that have exposed the role of government in both causing disasters and in causing populations to be more vulnerable to them. Cooper, *supra* note 12, at 502; see WLJMAN & TIMBERLAKE, *supra* note 17, at 11–17; LEON GORDENKER, *REFUGEES IN INTERNATIONAL POLITICS* 13 (1987); see also MYERS & KENT, *supra* note 19, at 169 (listing “governmental shortcomings” as a factor that could generate environmental refugees).

⁸⁸ Cooper, *supra* note 12, at 486–87.

⁸⁹ Cooper, *supra* note 12, at 502; see also Hong, *supra* note 72, at 323 (affirming that “developing countries increasingly confront dangerous environmental conditions due to industrial activity and exploitation, often at the request or with the approval of their governments. When such government actions create life-threatening circumstances, the most seriously affected victims of those situations should be entitled to refugee status”).

⁹⁰ *E.g.*, the refugee must have a fear of being persecuted because of “race, religion, nationality, [or] membership of a particular social group or political opinion.” 1951 Refugee Convention, *supra* note 8, art. 1.

First, as Christopher Kozoll stresses, “[t]o establish that flight based on environmental harm is indeed flight based on well-founded fear of persecution, an individual will have to show more than a generalised environmental degradation.”⁹¹ Thus, an individual has to bring evidence of a severe environmental harm that either threatens his life or freedom, or is of such nature or extent that it would reasonably induce fear. In addition, for the persecution to be individualized, the environmental harm must affect the individual in his capacity as a member of a protected category to a greater degree than other persons.⁹²

Secondly, in order to establish persecution, a person has to demonstrate both the persecutory impact and persecutory intent on the part of the governmental entity. The nature of the intent required is more than volition or awareness of consequences. Thus, the governmental entity must have been negligent or inactive “because of,” and not merely “in spite of” its adverse effects upon an identifiable group.⁹³ As a consequence, Jessica Cooper’s argument of state persecution in cases of environmental degradation, as illustrated by examples of governmental negligence or inaction in the African Sahel and Chernobyl, is unconvincing.⁹⁴

James Hathaway states, however, that “persecution may be defined as the sustained or systemic violation of basic human rights demonstrative of a failure of State protection” and further affirms that

[a] well-founded fear of persecution exists when one reasonably anticipates that remaining in the country may result in a form of serious harm which the government cannot or will not prevent, including either “specific hostile acts or . . . an accumulation of adverse circumstances such as discrimination existing in an atmosphere of insecurity and fear.”⁹⁵

Similarly, Jeanhee Hong contends that the substantial element in the refugee definition is the absence of state protection.⁹⁶ She further argues that the language of the Convention and the Protocol suggests that refugeehood can result even in the absence of persecution, for instance from circumstances that simply render a government unable to extend effective protection.⁹⁷

Her argument is based on the Handbook’s recognition of “grave circumstances” rendering a government’s protection “ineffective,” which

⁹¹ Kozoll, *supra* note 69, at 284; *see also* Handbook on Procedures and Criteria for Determining Refugee Status, *supra* note 72, at 39.

⁹² Kozoll, *supra* note 69, at 284.

⁹³ Roliff Purrington & Michael Wynne, *Environmental Racism: Is a Nascent Social Science Concept a Sound Basis for Legal Relief?*, 35 HOUS. LAW. 34, 35 (Mar.–Apr. 1998).

⁹⁴ Cooper, *supra* note 12, at 505–06.

⁹⁵ JAMES HATHAWAY, THE LAW OF REFUGEE STATUS 105 (1991); *see also* Handbook on Procedures and Criteria for Determining Refugee Status, *supra* note 72, at 12 (“Where serious discriminatory or other offensive acts are committed by the local populace, they can be considered as persecution if they are knowingly tolerated by the authorities, or if the authorities refuse, or prove unable, to offer effective protection.”).

⁹⁶ Hong, *supra* note 72, at 339.

⁹⁷ *Id.*

suggests that the refugee definition should be revised to consider environmentally-hazardous circumstances.⁹⁸ Moreover, she argues that the Handbook's statement that "whether unable or unwilling to avail himself of the protection of his Government, a refugee is always a person who does not enjoy such protection"⁹⁹ emphasizes the significance of the absence of state protection in the refugee definition, regardless of its cause.¹⁰⁰ Nevertheless, she admits that

reinterpreting or revising the refugee definition to include all environmentally-displaced persons who lack the protection of their States would open the door to a flood of refugees far beyond what the international community is able to manage. Such an interpretation, therefore, would have to be limited by specific requirements, such as the occurrence of certain threshold levels of environmental destruction in the country of origin, and the existence of specific circumstances rendering the applicants unable to avail themselves of their government's protection within a designated period of time.¹⁰¹

The 1951 Refugee Convention considers the lack of state protection as persecutory if, and only if, the persecutory intent on the part of the governmental entity may be established. According to the provisions of the Handbook, corroborated by the Refugee Convention, persecution may take the form of environmental damage.¹⁰² Persecution may be inflicted directly by the governmental entity or indirectly by the lack of protection from these governmental entities. In any case, the harm must be inflicted on cognizable groups with the particular intent to harm these groups because of a valuation of the lives and cultures of the people harmed.¹⁰³ As will be explained in the following subpart, it is paramount to establish that the persecution is based on one of the five grounds specified in the refugee definition, namely "on account of race, religion, nationality, membership in a particular social group, or political opinion."¹⁰⁴

B. The Blurred Grounds of the Persecution Suffered by Environmentally-Displaced Persons

At first glance, natural disasters, which have widespread impacts and affect people indiscriminately without regard to race, religion, nationality,

⁹⁸ *Id.*

⁹⁹ Handbook on Procedures and Criteria for Determining Refugee Status, *supra* note 72, at 97.

¹⁰⁰ Hong, *supra* note 72, at 339.

¹⁰¹ Hong, *supra* note 72, at 339–40.

¹⁰² See *supra* text accompanying note 74.

¹⁰³ Kozoll, *supra* note 69, at 306–07.

¹⁰⁴ 8 U.S.C. § 1101(a)(42) (2000); Alexander Aleinikoff observes that the U.S. Board of Immigration Appeals focuses primarily on whether the persecution likely to be suffered by the applicant is based on one of the five grounds specified in the refugee definition. Moreover, the adjudicators appear to adopt a narrow and technical readings of the specified grounds for persecution. T. Alexander Aleinikoff, *The Meaning of "Persecution" in U.S. Asylum Law*, in REFUGEE POLICY: CANADA AND THE UNITED STATES 292, 296 (Howard Adelman ed., 1990).

political opinion, or membership in particular social groups, do not give rise to refugee status. Similarly, in most cases, human-caused environmental degradation is not carried out in order to hurt people for any of the reasons enumerated in the refugee definition. Yet, Christopher Kozoll argues that victims of natural disasters and human-caused environmental degradation meet the traditional definition of refugee, as enshrined in international law, in at least two circumstances. First, when “a government systematically imposes the risks and burdens of decisions impacting environmental quality on members of a particular race, religion, nationality, social group or political opinion on account of one or more of these protected factors,” and second, “where the relevant authority refuses to mitigate or mitigates inadequately environmental disasters, whether of human origin or not, and in so doing ‘targets’ a group based on one of the listed factors.”¹⁰⁵ More precisely, Jessica Cooper posits that these victims of environmental damage, identified in the environmental justice literature as persons discriminated against and adversely affected by environmental decisions, belong to a social group of persons who are politically powerless to protect their environment.¹⁰⁶

The fifth category, “membership in a particular social group,” was added to the refugee definition without discussion or dissent in order to fill gaps left by the four more specific grounds of persecution.¹⁰⁷ It is therefore the most flexible ground of persecution. T. Alexander Aleinikoff observes that “the history of the Convention provides no support for a narrow reading of the grounds of persecution. Rather, it displays an intent to write a definition of refugee sufficiently broad to cover existing victims of persecution.”¹⁰⁸

Though subject to extensive interpretation, a social group must nevertheless be characterized by different elements. In particular, it must be defined independently from the persecution at issue. For this reason, a social group composed of persons lacking political power to protect its environment seems to be defined by nothing more than the harm sought to be remedied. To the contrary, Jessica Cooper argues that these persons form a group characterized by a “common experience” which is a component required to form a “social group” under the refugee definition: “[u]nder international refugee law, ‘social group’ has been interpreted to mean ‘a recognisable or cognisable group within . . . society that shares some . . . experience in common.’”¹⁰⁹ Indeed, to reassert the wording of the Handbook,

¹⁰⁵ Kozoll, *supra* note 69, at 273–74.

¹⁰⁶ Cooper, *supra* note 12, at 523–26.

¹⁰⁷ Conference of Plenipotentiaries on the Status of Refugees and Stateless Persons, Jan. 1, 1970, *Summary Record of the Twenty-third Meeting*, 8, U.N. Doc. A/CONF.2/SR.23, available at <http://www.unhcr.org/protect/PROTECTION/3ae68cda10.html>; see also 1 ATLE GRAHL-MADSEN, *THE STATUS OF REFUGEES IN INTERNATIONAL LAW* 219 (1966) (noting that the social group category covers many of the same cases as the other categories but is also broader and was designed to prevent gaps).

¹⁰⁸ Aleinikoff, *supra* note 97, at 298.

¹⁰⁹ Cooper, *supra* note 12, at 522 n.233 (quoting *Denissenko v. Haskett* FED No. 404/96 ¶ 20 (Mar. 22, 1996, Austl.), available at <http://www.austlii.edu.au/cgi-bin/disp.pl/au/cases/cth/>

these persons are “of similar background, habits or social status” and for this reason are subject to environmental discrimination.¹¹⁰

Dana Zartner Falstrom, however, argues that “political powerlessness is not an immutable characteristic that will make a person or group of persons members of a particular social group.”¹¹¹ Unless environmental victims are also associated by other factors, such as religion or culture, they do not constitute a social group. Eventually, some authors observe not only that political powerlessness is not a common characteristic to all victims of environmental damage,¹¹² but also that the argument of political powerlessness as a reason for persecution is itself questionable.

The theory that people suffer the risks and burdens of environmental degradation for reasons of race, religion, nationality, social group, or political opinion, which are the elements usually underlying political powerlessness, is controversial. Studies on environmental justice have focused on the socio-economic status of the victims of environmental degradation and the related issue of equity in burden-sharing of pollution.¹¹³ Although a large number of authors affirm that some persons experience violence through environmental discrimination,¹¹⁴ Roliff Purrington and Michael Wynne acknowledged that, at present, social science research on the topic of environmental racism is new and immature.¹¹⁵ Nothing approaching a consensus has been reached in the literature in regard to the standards or methodologies that should be employed to make a judgement about a claim of environmental racism. Thus, to argue that research on

federal_ct/unrep8379.html?query=denissenko%20v%20haskett).

¹¹⁰ Handbook on Procedures and Criteria for Determining Refugee Status, *supra* note 72, ¶ 77.

¹¹¹ Falstrom, *supra* note 9, at 13; *see also* IRA J. KURZBAN, IMMIGRATION LAW SOURCEBOOK 368–72 (10th ed. 2006) (discussing the meaning of membership in a particular social group). The U.S. Board of Immigration Appeals, which was struggling with the concept of “particular social group,” finally stated that it is a

group of persons all of whom share a common, immutable characteristic. The shared characteristic might be an innate one such as sex, color, or kinship ties, or in some circumstances it might be a shared past experience such as a former military leadership [position] or land ownership. The particular kind of group characteristic that will qualify under this construction remains to be determined on a case-by-case basis. However, whatever the common characteristic that defines the group, it must be one that the members of the group either cannot change, or should not be required to change because it is fundamental to their individual identities or consciences.

In re Acosta, 19 B.I.A. 211, 233 (1985), *available at* <http://www.usdoj.gov/eoir/vll/intdec/vol19/2986.pdf>.

¹¹² Falstrom, *supra* note 9, at 15.

¹¹³ *See* Robert W. Collin, *Review of the Legal Literature on Environmental Racism, Environmental Equity, and Environmental Justice*, 9 J. ENVTL. L. & LITIG. 121, 121–69 (1994) (reviewing the legal literature on environmental racism, equity, and justice); Deohn Ferris & David Hahn-Baker, *Environmentalists and Environmental Justice Policy*, in ENVIRONMENTAL JUSTICE—ISSUES, POLICIES, AND SOLUTIONS 66, 66–67 (Bunyan Bryant ed., 1995) (advocating expanding the environmental movement to include environmental justice).

¹¹⁴ Balakrishnan Rajagopal, *The Violence of Development*, WASH. POST, Aug. 9, 2002, at A19; GUNTHER BAECHELER, VIOLENCE THROUGH ENVIRONMENTAL DISCRIMINATION 1–3 (2005).

¹¹⁵ Purrington & Wynne, *supra* note 86, at 34.

environmental racism has reached a conclusion is a serious mischaracterization. An appropriated methodology to objectively assess, measure, or even define environmental racism has yet to be established.¹¹⁶

Moreover, it is noteworthy that although the burden of environmentally-polluting facilities and practices may indeed fall most heavily on lower income and minority groups, the use of the concept of environmental racism as a basis for legal relief presents several procedural and evidentiary problems. Environmental racism implies that industrial or governmental actors have intentionally placed polluting facilities in poor and minority neighborhoods with the particular intent of imposing the adverse effects upon these persons because of their "race" or "ethnicity" or "membership in a particular social group," while in fact these decisions may have been made for economic reasons.¹¹⁷ Therefore, Roliff Purrington and Michael Wynne conclude that "[t]o the extent minorities are disproportionately affected, the problem may be that some minorities unfairly find themselves at the lower end of the economic spectrum, suggesting a deeper societal problem of which the environmental pollution component is but a symptom."¹¹⁸

Though difficult, demonstrating that environmentally-displaced persons meet the criteria of the refugee definition is not impossible. In particular, victims of environmental degradation taking the form of an "environmental cleansing," which can be defined as the "deliberate manipulation and misuse of the environment so as to subordinate groups based on characteristics such as race, ethnicity, nationality, religion and so forth,"¹¹⁹ may be granted refugee status.

The most illustrative example of persecution through environmental damage for reasons of one or more of the five grounds enumerated in the refugee definition is the drainage of the marshes in southern Iraq. For millennia, the marshes covered an area of about 20,000 square kilometres in southern Iraq, where the Euphrates River meets the Tigris River.¹²⁰ They were inhabited by various tribes of Shi'a Muslims, collectively known as the Ma'dan or Marsh Arabs, who had been living in the marshes for over 5,000 years and had based their livelihood on the marshes through fishing, hunting, manufacturing handicraft from reeds and cane, buffalo breeding, and agriculture.¹²¹

Scholars posit that the Iraqi government has committed genocide of the Marsh Arabs, "deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part."¹²²

¹¹⁶ *Id.*

¹¹⁷ *Id.*

¹¹⁸ *Id.* at 35.

¹¹⁹ Mark A. Drumbl, *The International Responses to the Environmental Impacts of War*, 17 GEO. INT'L ENVTL. L. REV. 565, 627 (2005).

¹²⁰ Human Rights Watch, *The Iraqi Government Assault on the Marsh Arabs* 5 (Jan., 2003), available at <http://www.hrw.org/backgrounder/mena/marsharabs1.pdf>.

¹²¹ Alexander Tkachenko, *The Economy of the Iraq Marshes in the 1990s*, in THE IRAQI MARSHLANDS 36, 41 (Emma Nicholson & Peter Clark eds., 2002).

¹²² Convention on the Prevention and Punishment of the Crime of Genocide, art. 2(c), Dec. 9, 1948, 78 U.N.T.S. 277, 280 (entered into force Jan. 12, 1951) [hereinafter Genocide Convention];

Systematic draining of the marshes was an environmental attack that contributed to the genocide. Between 1991 and 1997, Iraq developed a water diversion project, which involved constructing giant canals to “dry the land and expel the inhabitants.”¹²³ The Iraqi government seriously affected the course of the rivers, preventing water from reaching two-thirds of the marshlands.¹²⁴ As a result, “[b]y 2000, the Iraqi portion of the Fertile Crescent was dry and the surrounding land crusted with salt.”¹²⁵ The subsequent loss of livelihood and forced deportations resulted in the death of thousands of Marsh Arabs.¹²⁶

The specific intent to destroy the Marsh Arabs may be established by, among other circumstantial evidence, the “Plan of Action for the Marshes” approved by Saddam Hussein.¹²⁷ “Though Iraqi officials may argue that the drainage served developmental purposes, researchers have found that ‘many of the canals and other engineering structures serve no agricultural, economic, or developmental purpose.’”¹²⁸

Eventually, the Iraqi popular perception of the Marsh Arabs came to demonstrate the intent to destroy the group because of their religious and ethnic lines. As Tara Weinstein explains,

[t]he former Iraqi government targeted the Marsh Arabs not only as Shi’a but also as a specific ethnic group connected with Iran. Marsh Arabs were singled out in the media “among the Shi’a for their alleged poverty, backwardness and immorality; they are disparagingly described as ‘monkey-faced’ people who are not ‘real Iraqis,’ but rather the descendants of black slaves.”¹²⁹

Armed conflicts are notorious for using the environment as a tool of war. However, customary principles of international law prohibit acts having

see also KRIANGSAK KITTICHAISAREE, INTERNATIONAL CRIMINAL LAW 71 (2001) (defining the act of genocide); STEVEN R. RATNER & JASON S. ABRAMS, ACCOUNTABILITY FOR HUMAN RIGHTS ATROCITIES IN INTERNATIONAL LAW 29 (2001) (citing the Genocide Convention for definition of genocide).

¹²³ Weinstein, *supra* note 16, at 715.

¹²⁴ Tkachenko, *supra* note 114, at 47.

¹²⁵ Weinstein, *supra* note 16, at 715 (citing Human Rights Watch, *supra* note 113, at 4–5 (describing “that the marshland ecosystem had collapsed by 2000,” resulting in the presence of large salt crusts)).

¹²⁶ See Ernestina Coast, *Demography of the Marsh Arabs*, in THE IRAQI MARSHLANDS 19, 19–21 (Emma Nicholson & Peter Clark eds., 2002); Christopher Mitchell, *Assault on the Marshlands*, in THE IRAQI MARSHLANDS 64, 66 (Emma Nicholson & Peter Clark eds., 2002).

¹²⁷ See MAX VAN DER STOEL, REPORT ON THE SITUATION OF HUMAN RIGHTS IN IRAQ 94–98 (1993), available at [http://www.unhchr.ch/Huridocda/Huridoca.nsf/0/dae4fa61e79b30c6c1256e580058f523/\\$FILE/G9310695.pdf](http://www.unhchr.ch/Huridocda/Huridoca.nsf/0/dae4fa61e79b30c6c1256e580058f523/$FILE/G9310695.pdf) (translating and reprinting the “Plan of Action for the Marshes”); see also Mitchell, *supra* note 119, at 64 (describing Saddam Hussein’s plans for the Marsh Dwellers); Weinstein, *supra* note 16, at 718 (reporting that “the plan called for the destruction of homes, poisonings, assassinations, and the resettlement of Marsh Arabs on dry land, and specifically mentioned ‘poisoning the environment and burning homes’”).

¹²⁸ Weinstein, *supra* note 16, at 718–19; see also Mitchell, *supra* note 119, at 64, 67–68 (pointing out that along with the drainage, the Iraqi forces allegedly filled the waters themselves with toxic chemicals).

¹²⁹ Weinstein, *supra* note 16, at 719.

adverse effects on the environment when they cause unnecessary damage or excessive destruction.¹³⁰ Environmental damage has not, however, been the main concern of international tribunals and courts. Asylum claims are more likely to focus on other issues rather than the environmental aspects of the conflict.¹³¹ Thus, one may indeed suffer environmental persecution for any of the reasons enumerated in the 1951 Refugee Convention. A survey of the legal literature highlights, however, the limited number of cases illustrating this hypothesis, effectively excluding most environmentally-displaced persons from refugee protection.¹³²

C. The Problematic Dichotomy Among Environmentally-Displaced Persons

The 1951 Refugee Convention requires that a refugee be outside his country of origin, and accordingly does not encompass situations of internal displacement.¹³³ In international law, there is a dichotomy between the protection afforded to “environmental refugees” and persons internally-displaced for environmental reasons. Yet reference to the term “persons internally-displaced for environmental reasons” is in itself problematic. Indeed, there is no authoritative definition of “internally-displaced persons” in international law. Since 1975, however, displaced persons have been included in the mandate of UNHCR, which considers “internally-displaced persons” as any person or group of persons who, if they had breached an international border, would be refugees.¹³⁴ The definition appears to exclude most of the persons internally-displaced for environmental reasons since environmentally-displaced persons are often escaping environmental pressures rather than the enumerated persecutions.¹³⁵

In 1998, the UN Secretary-General’s representative for displaced persons, Francis M. Deng, proposed the following definition of internally-displaced persons:

internally displaced persons are persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or

¹³⁰ See Carl E. Bruch, *All’s not Fair in (Civil) War: Criminal Liability for Environmental Damage in Internal Armed Conflict*, 25 VT. L. REV. 695, 710 (2001) (noting that principles of international customary law are “a source of norms to prevent, minimize, and punish environmental damage” during armed conflicts).

¹³¹ See MYERS & KENT, *supra* note 19, 17–19 (1995) (explaining that environmental factors cause the problems that lead refugees to migrate).

¹³² See *id.* at 154 (arguing that the current regime “ignore[s] environmental refugees simply because there is no established mode of dealing with the problem they represent”).

¹³³ DAVID A. KORN, EXODUS WITHIN BORDERS: AN INTRODUCTION TO THE CRISIS OF INTERNAL DISPLACEMENT 2 (1999).

¹³⁴ United Nations High Comm’r for Refugees, Protecting Refugees, <http://www.unhcr.org/protect/3b84c7e23.html> (last visited Apr. 15, 2007).

¹³⁵ Int’l Org. for Migration, *supra* note 12, at 23.

natural or human-made disasters, and who have not crossed an internationally recognized State border.¹³⁶

This definition would encompass persons internally-displaced for environmental reasons, but it is not legally binding. It serves only as a base for discussion on the actual content of international law's protection of internally-displaced persons.¹³⁷

In any case, there is little benefit in according people affected by environmental degradation the status of displaced persons since it is only a descriptive term, not a status that confers obligations on states.¹³⁸ The Guiding Principles on Internal Displacement are not in any way binding on states, nor are they part of customary law.¹³⁹

D. Conclusions Concerning the Environmental Refugee

Although the 1951 Refugee Convention cannot be reasonably interpreted to include environmentally-displaced persons, and some authors affirm that it was not drafted with those persons in mind,¹⁴⁰ nothing actually prevents a country from granting refugee status to a person persecuted through environmental damage for one of the reasons enumerated in the 1951 Refugee Convention. Environmental damage or degradation is not recognized by Article 1 of the 1951 Refugee Convention as a valid ground for seeking asylum, yet it may certainly be a tool of persecution.

Thus the reasons to grant refugee status in circumstances of environmental degradation may be grounded in the letter of the 1951 Refugee Convention, namely for reasons of race, religion, nationality, membership of a particular social group, or political opinion. In other words, the political or social reasons underlying the environmental degradation appear to legitimate refugee protection. Nonetheless, the actual state of refugee law presents some drawbacks. It is noteworthy that people displaced forcibly because of environmental impairment do not

¹³⁶ Francis Deng, *Guiding Principles on Internal Displacement: Report of the Representative of the Secretary-General*, ¶ 2, U.N. Doc. E/CN.4/1998/53/ADD.2 (Feb. 11, 1998), available at <http://www.unhcr.ch/html/menu2/7/b/principles.htm>.

¹³⁷ But see Francis M. Deng, *Foreword* to THE BROOKINGS INST., HANDBOOK FOR APPLYING THE GUIDING PRINCIPLES ON INTERNAL DISPLACEMENT at i (1999) (noting that the Guiding Principles "are based on and consistent with international human rights law, humanitarian law, and refugee law by analogy").

¹³⁸ Keane, *supra* note 6, at 217.

¹³⁹ See Marco Simons, *The Emergence of a Norm Against Arbitrary Forced Relocation*, 34 COLUM. HUM. RTS. L. REV. 95, 128 (2002) (stating that, while the Guiding Principles are not yet customary in international law, "they may soon reach that status").

¹⁴⁰ See, e.g., McCue, *supra* note 9, at 173 (stating that "political pressures keep the system from expanding to address environmentally displaced migrants"); Falstrom, *supra* note 9, at 2 (commenting that the 1951 Refugee Convention has been implemented in ways that "make it practically impossible for an environmentally displaced person to gain asylum"); Keane, *supra* note 6, at 215 (noting that "the term 'environmental refugees' is a misnomer, as environmentally displaced persons are not recognized as refugees").

receive equal consideration and protection. Depending on the nature of the incident provoking environmental degradation, the migrants appear to be more or less likely to fit the international legal definition of refugee. For instance, Gregory McCue observes that if the environmental destruction is caused by war, then migrants are more likely to be recognized as refugees and, accordingly, to receive the attendant protection.¹⁴¹ In contrast, he asserts that people for whom environmental degradation is a primary cause of forced migration do not deserve refugee protection.¹⁴²

Thus, though environmentally-displaced persons may be granted refugee status, the term "environmental refugees" appears to be a legal misnomer.¹⁴³ The term is legally meaningless and confusing since it does not refer to a consistent category of displaced persons. Environmental degradation is not in itself a ground of persecution; rather it is one tool of persecution. For this reason, UNHCR, the principal international body entrusted with the task of ensuring the proper treatment of refugees and finding enduring solutions for their plight,¹⁴⁴ as well as the International Organization for Migration (IOM) and the Refugee Policy Group, have all opted not to use the term "environmental refugee," and instead to use the term "environmentally-displaced persons."¹⁴⁵ Nevertheless, Gregory McCue reports that "[i]n environmentally-driven, transboundary migrations where countries or regional organizations have extended their refugee definition

¹⁴¹ McCue, *supra* note 9, at 156. Persons for whom environmental degradation is the primary cause of movement may be defined as people who would not have moved if it had not been for one of a few general kinds of degradation of their natural environment. *Id.* at 157.

¹⁴² McCue, *supra* note 9, at 177.

¹⁴³ JoAnn McGregor, *Refugees and the Environment*, in GEOGRAPHY AND REFUGEES: PATTERNS AND PROCESSES OF CHANGE 157, 157-70 (Richard Black & Vaughn Robinson eds., 1993). The term "environmental refugee" is poorly defined and legally meaningless and confusing. *See also* Kibreab Gaim, *Migration, Environment and Refugeehood*, in ENVIRONMENT AND POPULATION CHANGE 115, 115-29 (Basia Zaba & John Clarke eds., 1994) (discussing the difficulty of determining the exact role played by environmental change in contributing to mass population displacements); Richard Black, *supra* note 63, at 1-2 (questioning the value of the very notion of "environmental refugees"). Black sees the concept as a myth or, in other words, as a misleading, highly politicized, and potentially damaging concept. Black argues that there are no environmental refugees as such. While environmental factors do play a part in forced migration, they are always closely linked to a range of other political and economic factors, so that focusing on the environmental factors in isolation does not help in understanding specific situations of population displacement. *Id.* at 2-3.

¹⁴⁴ *See* STAFF OF S. COMM. ON THE JUDICIARY, 96th CONG., 1st Sess., WORLD REFUGEE CRISIS: THE INTERNATIONAL COMMUNITY'S RESPONSE 253-320 (Comm. Print 1979) (identifying UNHCR as the primary international agency for protecting refugees and coordinating action on their behalf); *see also* McCue, *supra* note 9, at 151, 170-73 (explaining the historical development of UNHCR).

¹⁴⁵ *See* Norman Myers, *Environmentally-Induced Displacements: The State of the Art*, in ENVIRONMENTALLY-INDUCED POPULATION DISPLACEMENTS AND ENVIRONMENTAL IMPACTS RESULTING FROM MASS MIGRATIONS 21, 21 (U.N. High Comm'r for Refugees et al. eds., 1996) (defining environmentally-displaced persons as "persons who are displaced within their own country of habitual residence or who have crossed an international border and for whom environmental degradation, deterioration or destruction is a major cause of their displacement, although not necessarily the sole one").

to people fleeing ‘events seriously disturbing the public order,’¹⁴⁶ the UNHCR can and does administer this broader statutory language.”¹⁴⁷

In conclusion, a substantial number of people have fled or are likely to flee across national borders for environmental circumstances that fall outside of the scope of the 1951 Refugee Convention, and are not accordingly afforded any legal protection. Likewise, the refugee protection excludes environmentally-displaced persons who are still within their country of origin. Legal scholars have therefore made propositions in relation to the protection of environmentally-displaced persons that will be discussed in the next Part.

IV. PROPOSITIONS AND ARGUMENTS IN RELATION TO THE PROTECTION OF ENVIRONMENTALLY-DISPLACED PERSONS

A. The Conundrums of Revising the Traditional Refugee Definition to Encompass Environmentally-Displaced Persons

In response to the problems of revising the traditional definition of refugee to encompass the environmentally-displaced person, several propositions have emerged. At the regional level, the Organization of African Unity (OAU) adopted the Convention Governing the Specific Aspects of Refugee Problems in Africa in 1969.¹⁴⁸ Reasserting the definition of the 1951 Refugee Convention, it further states:

the term refugee shall also apply to every person who, owing to external aggression, occupation, foreign domination or events seriously disturbing the public order in either part or the whole of his country of origin or nationality, is compelled to leave his place of habitual residence in order to seek refuge in another place outside his country of origin or nationality.¹⁴⁹

The OAU Convention was not primarily designed with environmentally-displaced persons in mind, but unequivocally includes victims of

¹⁴⁶ As McCue states, this language has only been adopted by the Organization of African Unity (OAU) and the Organization of American States (OAS). McCue, *supra* note 9, at 153 n.17; see Convention Governing the Specific Aspects of the Refugee Problems in Africa, art. 1, §2, Sept. 10, 1969, 1001 U.N.T.S. 45, *available at* http://www.africa-union.org/root/au/Documents/Treaties/Text/Refugee_Convention.pdf [hereinafter OAU Convention] (defining the term refugee as applying “to every person who, owing to external aggression, occupation, foreign domination or events seriously disturbing public order . . . is compelled to leave his place of habitual residence in order to seek refuge in another place outside his country of origin or nationality”); CARTAGENA DECLARATION ON REFUGEES, ANNUAL REPORT OF THE INTER-AMERICAN COMMISSION ON HUMAN RIGHTS, OAS Doc. OEA/Ser.L/V/II.66/doc.10, rev. 1, at 190–93 (Nov. 19–22, 1984) [hereinafter Cartagena Declaration], *available at* <http://www.unhcr.org/home/RSDLEGAL/3ae6b36ec.html> (explaining that the definition of refugee should be expanded to include those displaced by “other circumstances which have seriously disturbed public order”).

¹⁴⁷ McCue, *supra* note 9, at 153–54 (citing an Interview by Gregory McCue with Ruven Menikdiwela, UNHCR Associate Legal Officer, in Washington D.C. (Mar. 25, 1993)).

¹⁴⁸ OAU Convention, *supra* note 139, art. 1.

¹⁴⁹ *Id.*

environmental crises since such events seriously disturb the public order. Accordingly, these “environmental refugees” are included in UNHCR’s mandate.¹⁵⁰

Nevertheless, persons meeting only the additional definitional requirements, but not the requirements congruent to the 1951 Refugee Convention, are only entitled to temporary protection. These refugees are therefore protected from forcibly being returned to their home states but are not allowed to resettle in the receiving state.¹⁵¹ At the time the 1951 Refugee Convention was elaborated, temporary protection was justified by the fact that the 1951 Refugee Convention was primarily aimed at assisting the mass influx of people displaced by wars of independence throughout Africa, who would ultimately return to their home states.¹⁵² In contrast, environmentally-displaced persons often leave behind an environment that no longer sustains a living and may remain devastated for a long period of time. Consequently, a mere provisional protection improves the situation of environmental refugees in Africa. It does not, however, provide an adequate remedy to their vulnerable situation.

Similarly, in 1984 the Organization of American States (OAS) adopted the Cartagena Declaration on Refugees, which provides in its article 3 that

in addition to containing the elements of the 1951 Convention . . . and the 1967 Protocol . . . [the definition] includes among refugees persons who have fled their country because their lives, safety or freedom have been threatened by generalized violence, foreign aggression, internal conflicts, massive violations of human rights or other circumstances which have seriously disturbed the public order.¹⁵³

Like the OAU Convention, the Cartagena Declaration on Refugees was not primarily designed with environmentally-displaced persons in mind, but arguably includes victims of environmental crisis since such events are seriously disturbing the public order.¹⁵⁴ The International Conference on Central American Refugees (CIREFCA) report interpreting the Cartagena Declaration distinguishes, however, between “victims of natural disasters” and other events “seriously disturbing the public order,” and observes that the former do not qualify as refugees.¹⁵⁵ In contrast, human-made events, such as accidents, would qualify since they are not “natural” disasters. Therefore, determining the causal role of human activities in slow-onset disruptions, although difficult, remains critical to qualify as a refugee under

¹⁵⁰ McCue, *supra* note 9, at 153–54.

¹⁵¹ Cooper, *supra* note 12, at 480, 498.

¹⁵² *Id.*

¹⁵³ Cartagena Declaration, *supra* note 139, art. 3.

¹⁵⁴ Cooper, *supra* note 12, at 499; Keane, *supra* note 6, at 216.

¹⁵⁵ United Nations High Comm’r on Refugees, Document CIREFCA/89/9 (1989) (English version); see also Cancado Trindade, *The Contribution of International Human Rights Law to International Change*, in ENVIRONMENTAL CHANGE AND INTERNATIONAL LAW: NEW CHALLENGES AND DIMENSIONS 244, 299 (Edith Brown Weiss ed., 1992).

the Cartagena Declaration. Yet, the instrument is not legally binding on states that are parties to the OAS, so its practical effects are doubtful.

B. Proposed Definition of "Environmental Refugee" at the International Level

Contemporary causes of mass migration have undoubtedly changed since the formulation of the 1951 Refugee Convention. Environmental factors now play a critical role in migration phenomena. For this reason, scholars advocate a constructive and innovative interpretation of the 1951 Refugee Convention. In particular, James Hathaway highlights that "there has, for far too long, been an anachronistic fixation with literalism, with insufficient attention paid to the duty to read text in line with the context, object and purpose of a treaty."¹⁵⁶ Thus, there has been a failure to adequately develop the potential for treaty law to play a genuinely transformative role in the international system. As Hathaway states, this approach "misreads the authentic rules of treaty interpretation, and bespeaks a lack of creativity within the bounds expressly sanctioned by States."¹⁵⁷

In 1985, Essam El-Hinnawi used the term "environmental refugees" to describe "those people who have been forced to leave their traditional habitat, temporarily or permanently, because of a marked environmental disruption (natural and/or triggered by people) that jeopardized their existence and/or seriously affected the quality of their life."¹⁵⁸ By this definition "environmental disruption" means any physical, chemical, or biological changes in the ecosystem (or the resource base) that render it, temporarily or permanently, unsuitable to support human life.¹⁵⁹

Norman Myers further described the political, social, and economic components of the term "environmental refugees" in a comprehensive study on the issue.¹⁶⁰ Eventually, Jessica Cooper suggested expressing the proposed definition in legal terms, advocating an expansion of the traditional refugee definition in the following terms:

any person who owing (1) to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion, or (2) to degraded environmental conditions threatening his life, health, means of subsistence, or use of natural resources, 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.¹⁶¹

Nevertheless, a definition that has survived without modifications for more than five decades is not realistically likely to be modified, especially when

¹⁵⁶ JAMES HATHAWAY, *THE RIGHTS OF REFUGEES UNDER INTERNATIONAL LAW* 49 (2005).

¹⁵⁷ *Id.*

¹⁵⁸ EL-HINNAWI, *supra* note 6, at 4.

¹⁵⁹ McCue, *supra* note 9, at 158.

¹⁶⁰ Myers, *supra* note 19, at 14–18.

¹⁶¹ Cooper, *supra* note 12, at 480, 494.

considering the attitudes and priorities of governments. Moreover, some authors challenge an expansion of the refugee definition encompassing environmental degradation as a valid ground for seeking asylum. Since in most cases environmental change cannot be meaningfully separated from political, economic, and social changes, it appears meaningless to recognize environmental refugees.¹⁶² Eventually, some authors posit that expanding the refugee definition presents limited assets for environmentally-displaced persons since the refugee definition requires the crossing of internationally recognized borders and therefore excludes most environmentally-displaced persons from international protection.¹⁶³

Therefore, there appears to be a certain impetus in citing refugees as a reason for protecting the environment, and in citing the environment as a reason for protecting refugees. Yet, it is not practical to advocate an expansion of the refugee definition to include environmental degradation as a ground to seek asylum. What is of more practical import is to understand the relationship between people and the environment as part of an analysis of the causes and consequences of movement, rather than as the sole cause or consequence.¹⁶⁴ This is the focal point of the alternative propositions made in order to deal specifically with the issue of environmentally-displaced persons, as discussed in the following subpart.

C. The Limits of Applying the Complementary Forms of International Protection to Environmentally-Displaced Persons

Although the refugee definition may vary according to the different legal systems,¹⁶⁵ refugee status and its related rights remain circumscribed to a purposefully narrow proportion of the persons in need of international protection. This Article has highlighted the major impediments to recognizing refugee status of environmentally-displaced persons. Yet, UNHCR has acknowledged the particular vulnerability of environmentally-displaced persons and, accordingly, has emphasized the need to focus international attention on the increasing number of persons affected by environmental crisis by setting up an international protection regime.¹⁶⁶ Until now, states have recognized (on an ad hoc basis) complementary forms of protection to categories of persons, who do not fit neatly in the refugee definition, but nonetheless deserve international protection.¹⁶⁷

These forms of protection are in all respects based on human rights treaties or on more general humanitarian principles.¹⁶⁸ The regimes of

¹⁶² McGregor, *supra* note 136, at 158.

¹⁶³ Keane, *supra* note 6, at 217.

¹⁶⁴ *Id.* at 223.

¹⁶⁵ See GUY GOODWIN-GILL, *THE REFUGEE IN INTERNATIONAL LAW* 3–29 (1996) (noting the different legal definitions given to the term refugee).

¹⁶⁶ United Nations High Comm'r for Refugees, UNHCR's Partners, <http://www.unhcr.org/protect/PROTECTION/3b03da604.html> (last visited Apr. 15, 2007).

¹⁶⁷ Jane McAdam, *Complementary Protection and Beyond: How States Deal with Human Rights Protection* 1 (United Nations High Comm'r of Refugees, Working Paper No. 118, 2005).

¹⁶⁸ *Id.* at 3. See generally D. Perluss & J.F. Hartman, *Temporary Refuge: Emergence of a*

complementary protection are not, however, regulated by international law. To the contrary, they are subject to national legislation, which specifies the eligibility criteria as well as the rights and entitlements of complementary protection beneficiaries. Such legislation usually provides a lower level of protection and depends on the political and economic interests of the host country.¹⁶⁹ It is noteworthy to emphasise that complementary protection broadens the basis for international protection, particularly limited under the 1951 Refugee Convention and the 1967 Refugee Protocol. Therefore, such a source of alternative protection should not be considered to be of less importance. Complementary protection has traditionally been discretionary and based on compassion, although frameworks predetermining the criteria for complementary protection, in a similar fashion to the 1951 Refugee Convention, have flourished in recent years.¹⁷⁰

This Article reviews the different means of protection elaborated in the European Union and the United States. Describing the purpose as well as the main point of these instruments' legal provisions, this Article analyzes whether environmentally-displaced persons may be eligible for complementary protection in any, if not all, of these regimes. Later, it discusses the need to further elaborate new instruments, in particular an international instrument dealing specifically with the issue of environmentally-displaced persons.

1. Complementary Protection in Europe: The Forgotten Category of Environmentally-Displaced Persons

At the European level, several instruments on complementary protection have been adopted. Some examples are the Directive on Minimum Standards for Giving Temporary Protection in the Event of a Mass Influx of Displaced Persons and on Measures Promoting a Balance of Efforts Between Member States in Receiving Such Persons and Bearing the Consequences Thereof (Directive on Temporary Protection),¹⁷¹ and the

Customary Norm, 26 VA. J. INT'L L. 551 (1986) (discussing the 1951 UN convention pertaining to refugees); G.S. Goodwin-Gill, Commentary, *Non-Refoulement and the New Asylum Seekers*, 26 VA. J. INT'L L. 897 (1986) (discussing the Geneva Conventions); K. Hailbronner, *Non-Refoulement and "Humanitarian" Refugees: Customary International Law or Wishful Legal Thinking?*, 26 VA. J. INT'L L. 857 (1986) (discussing UN convention among other protections or lack thereof for refugees).

¹⁶⁹ See European Council on Refugees & Exiles, *European Asylum Systems: Legal and Social Conditions for Asylum Seekers and Refugees in Western Europe*, 2003, <http://www.ecre.org/conditions/2003/austria2003.pdf> (last visited Apr. 15, 2007) (listing of Austria's legislative approach). For a discussion of European Union subsidiary protection practices, see generally Jane McAdam, *The European Qualification Directive: The Creation of a Subsidiary Protection Regime*, 17 INT'L J. REFUGEE L. 461 (2005).

¹⁷⁰ McAdam, *supra* note 169, at 465 n.21.

¹⁷¹ Council Directive 2001/55, 2001 O.J. (L212) 12 (EC) [hereinafter Directive on Temporary Protection]. The Directive on Temporary Protection is the first piece of legislation flowing from the asylum agenda of the Amsterdam Treaty. The Directive on Temporary Protection "entered into force on 7 August 2001 (date of publication in the Official Journal of the EC) and applies to all European Union Member States except for Denmark and Ireland. According to article 32(1)

Directive on Minimum Standards for the Qualification and Status of Third Country Nationals or Stateless Persons as Refugees or as Persons Who Otherwise Need International Protection and the Content of the Protection Granted (Directive on Subsidiary Protection).¹⁷² This Article analyzes the conundrum related to the present regime of complementary protection in Europe, and further attempts to demonstrate that, as a matter of course, the instruments do not provide a satisfactory outcome for environmentally-displaced persons. Environmentally-displaced persons may qualify for temporary protection, yet it is obviously not an appropriate protection considering the peculiarity of the human rights violations. Conversely, environmentally-displaced persons have not been considered at the drafting nor at the adoption of the Directive on Subsidiary Protection, and may not be eligible for protection under its provisions.

a. Eligibility Criteria for International Protection Under the Directive on Temporary Protection

Under the terms of the Directive on Temporary Protection, temporary protection is defined as

a procedure of exceptional character to provide, in the event of a mass influx or imminent mass influx of displaced persons from third countries who are unable to return to their country of origin, immediate and temporary protection to such persons, in particular if there is also a risk that the asylum system will be unable to process this influx without adverse effects for its efficient operation, in the interests of the persons concerned and other persons requesting protection.¹⁷³

The provisions further read:

“displaced persons” means third-country nationals or stateless persons who have had to leave their country or region of origin, or have been evacuated, in particular in response to an appeal by international organisations, and are unable to return in safe and durable conditions because of the situation

of the directive, the 13 Member States bound by the Directive have to ensure the necessary domestic legislation is in place by Dec. 31 2002.” European Council on Refugees & Exiles, ECRE Information Note on the Council Directive 2001/55/EC of 20 July 2001 on Minimum Standards for Giving Temporary Protection in the Event of a Mass Influx of Displaced Persons and on Measures Promoting a Balance of Efforts Between Member States in Receiving Such Persons and Bearing the Consequence Thereof, <http://www.ecre.org/statements/tpsum.html> (last visited Apr. 15, 2007).

¹⁷² Council Directive 2004/83, 2004 O.J. (L 304) 12 (EC) [hereinafter Directive on Subsidiary Protection]. Other Member-States of the European Union must bring into force laws, regulations and administrative provisions to comply with the Directive of Subsidiary Protection by October 10, 2006. See European Council on Refugees & Exiles, Information Note on the Directive on Subsidiary Protection, IN1/10/2004/ext/CN, <http://www.ecre.org/statements/qualpro.pdf> (last visited Apr. 15, 2007) (analyzing the key provisions of the Directive on Subsidiary Protection).

¹⁷³ Directive on Temporary Protection, *supra* note 164, art. 2(a).

prevailing in that country, who may fall within the scope of Article 1A of the Geneva Convention or other international or national instruments giving international protection, in particular: (i) persons who have fled areas of armed conflict or endemic violence; (ii) persons at serious risk of, or who have been the victims of, systematic or generalised violations of their human rights.¹⁷⁴

The use of the word “in particular” implies that the drafters had in mind situations that may lead to mass influx. However, other situations that prevent a person from returning in safe and durable conditions may qualify for temporary protection. The provisions are therefore flexible enough to address new situations arising under international law.

The Council of Europe (Council) has established the temporary protection regime and is in charge of determining who may qualify as a mass influx of displaced persons entitled to temporary protection. The decision, binding on all member states, was adopted by a qualified majority on a proposal from the European Commission (Commission).¹⁷⁵ Arguably, environmentally-displaced persons may qualify for temporary protection. There is no need to further demonstrate the relationship between degradation of the environment and human rights violations, such as the right to food, water, housing, and so on, extensively described and discussed in the legal literature. Nevertheless, it is paramount to determine whether temporary protection is appropriate considering the peculiarity of the situation of environmentally-displaced persons.

The Directive on Temporary Protection specifies that unless terminated by another Council decision, the normal duration of temporary protection is one year, with an automatic extension of two six-month periods.¹⁷⁶ The maximum possible duration of temporary protection is a total of three years because if the reasons for temporary protection persist, the Council may decide (again, by qualified majority and on a proposal by the Commission) to extend the protection for another year.¹⁷⁷ Although Article 3.2 provides that “Member States shall apply temporary protection with due respect for human rights and fundamental freedoms and their obligations regarding *non-refoulement*,” after a period of three years the regime of temporary protection expires.¹⁷⁸

Temporary protection is based on the conviction that it “can represent a reasonable administrative policy in an emergency situation only where individual refugee status determination is not immediately practicable and where its application will enhance admission to the territory.”¹⁷⁹ Thus, temporary protection may relieve persons affected by sudden environmental disaster who may return to their country of origin once the crisis is over. Yet, for those persons affected by severe and durable environmental

¹⁷⁴ *Id.* art. 2(c).

¹⁷⁵ *Id.* art. 5.

¹⁷⁶ *Id.* art. 4.1.

¹⁷⁷ *Id.* art. 4.2.

¹⁷⁸ Directive on Temporary Protection, *supra* note 164, art. 3.2 (emphasis added).

¹⁷⁹ European Council on Refugees and Exiles, *supra* note 165.

degradation, return to the country of origin in the near future remains impossible, so temporary protection is of limited assistance.

Notwithstanding the controversial dichotomy in international law between the level of protection afforded to refugees and the level of protection for other persons in need of international protection, which has been severely criticized for being inconsistent with international obligation of nondiscrimination,¹⁸⁰ the main concern in relation to environmentally-displaced persons is the type of protection afforded and its ability to remedy the difficult situation.

b. Eligibility Criteria for International Protection Under the Directive on Subsidiary Protection

The Qualification Directive is a supranational instrument harmonizing the regime of complementary protection in Europe. From the outset, however, the ability of the instrument to alleviate the problem of forced migrants that do not qualify for refugee status appears dubious. Indeed, Jane McAdam points out that "[t]hough it has shifted complementary protection beyond the realm of ad hoc and discretionary national practices to a codified regime, it does not reflect best practice and unjustifiably entrenches a protection hierarchy."¹⁸¹

The Directive on Subsidiary Protection sets forth the legal status as well as the rights associated with the subsidiary protection regime. The directive reads:

"person eligible for subsidiary protection" means a third country national or a stateless person who does not qualify as a refugee but in respect of whom substantial grounds have been shown for believing that the person concerned, if returned to his or her country of origin, or in the case of a stateless person, to his or her country of former habitual residence, would face a real risk of suffering serious harm as defined in Article 15, and to whom Article 17(1) and (2) do not apply, and is unable, or, owing to such risk, unwilling to avail himself or herself of the protection of that country.¹⁸²

¹⁸⁰ The Directive on Temporary Protection reminds that "[w]ith respect to the treatment of persons enjoying temporary protection under this Directive, the Member States are bound by obligations under instruments of international law to which they are party and which prohibit discrimination." Directive on Temporary Protection, *supra* note 164, art. 16. In practice, however, the rights and entitlements accorded to refugees and beneficiaries of temporary protection differ. See McAdam, *supra* note 167, at 5 (discussing the problem in relation to the Directive on Subsidiary Protection.) McAdam stresses that "[I]legally, there is no reason why the source of protection should require differentiation in the rights and status accorded to a beneficiary. UNHCR has stated that rights and benefits should be based on need rather than the grounds on which a person has been granted protection, and that there is accordingly no valid reason to treat beneficiaries of subsidiary protection differently from Convention refugees." *Id.* at 5-6.

¹⁸¹ McAdam, *supra* note 169, at 462.

¹⁸² Directive on Subsidiary Protection, *supra* note 165, art. 2(e).

Some scholars have expressed concern about the definition given to the terms of the Directive on Subsidiary Protection.¹⁸³ This Article will only examine the points of interest relevant to the issue of the protection of environmentally-displaced persons. Setting out the constitutive elements of subsidiary protection, Article 15 is certainly the critical provision of the Directive on Subsidiary Protection. Article 15 states that

serious harm consists of: (a) death penalty or execution; or (b) torture or inhuman or degrading treatment or punishment of an applicant in the country of origin; or (c) serious and individual threat to a civilian's life or person by reason of indiscriminate violence in situations of international or internal armed conflict.¹⁸⁴

The provision is very disappointing since it is based on "the least contestable human rights-based protections which already form part of most Member States' protection policies."¹⁸⁵

The definition of subsidiary protection employed in the Directive on Subsidiary Protection is based largely on international human rights instruments relevant to subsidiary protection. The most pertinent of these being Article 3 of the European Convention on Human Rights and Fundamental Freedoms (ECHR), Article 3 of the UN Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, and Article 7 of the International Covenant on Civil and Political Rights.¹⁸⁶

Jane McAdam argues that Article 15(b) "would apply to persons who are unable to demonstrate a link to a Convention ground, which may amount to cases where perpetrators resort to torture based on purely criminal motivation."¹⁸⁷ Similarly, Article 15(c) would apply to persons who do not qualify for refugee status, in particular in times of civil wars or internal armed conflicts when the well-founded fear of persecution based on one of the five grounds is difficult to determine.¹⁸⁸ Thus, McAdam posits that "[t]he provision reflects the existence of consistent, albeit varied, State practice of granting some form of complementary protection to persons fleeing the indiscriminate effects of armed conflict or generalised violence without a specific link to Convention grounds."¹⁸⁹

At first glance, the Directive on Subsidiary Protection's purpose suggests that the instrument may provide protection to environmentally

¹⁸³ See generally McAdam, *supra* note 169, at 461 (analyzing each term of the definition, as well as the practical implication for the recognition of international protection and the ensuing entitlement to specific rights).

¹⁸⁴ Directive on Subsidiary Protection, *supra* note 165, art. 15.

¹⁸⁵ McAdam, *supra* note 169, at 474.

¹⁸⁶ European Convention on Human Rights and Fundamental Freedoms, art. 3, Nov. 4, 1950, 213 U.N.T.S. 222; Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, art. 3, G.A. Res. 39/46, U.N. Doc. A/RES/39 (Dec. 10 1984); International Covenant on Civil and Political Rights, art. 7, G.A. Res. 2200A (XXI), U.N. GAOR, 21st Sess., Supp. No. 16, U.N. Doc. A/6316 (Dec. 16, 1966).

¹⁸⁷ McAdam, *supra* note 169, at 479.

¹⁸⁸ *Id.* at 480.

¹⁸⁹ *Id.* at 479–80.

displaced persons allegedly in need of international protection. Nevertheless, the directive further qualifies the types of harm that may trigger subsidiary protection. It then becomes difficult to argue that environmental crises fit within one of the enumerated category of serious harm as defined in the Directive on Subsidiary Protection under Article 15. Moreover, the wording of the provision does not leave any room for an additional type of “serious harm” in which environmental degradation could fit and any argument to the contrary would challenge both the letter and the spirit of the directive as expressed during the drafting of the instrument.

During the drafting process, the content of Article 15 was extensively discussed.¹⁹⁰ A human rights paragraph, applying specifically to acts outside the scope of subparagraphs (a) to (c), was drafted, affirming that serious harm could consist of a “violation of a human right, sufficiently severe to engage the Member State’s international obligations.”¹⁹¹ The provision was nonetheless deleted, confining the provision to three types of serious harm. Jane McAdam emphasises the drawback of the provision as it was finally adopted, stressing that

[t]he deletion of this broader human rights provision has significantly reduced the scope of the directive. It was the provision which allowed for the greatest development of the human rights-refugee law nexus, providing flexibility for addressing new situations arising in international law and relevant developments in the jurisprudence of the European Court of Human Rights. As Article 15 stands now, there is little room for interpretation and it may be that “inhuman or degrading treatment or punishment” becomes the focal point for seeking to broaden the directive’s scope, functioning in a similar fashion to the Convention’s “membership of a particular social group” category.¹⁹²

Although the Directive on Subsidiary Protection was discussed and elaborated at a time when the international community seemed to be particularly aware of the substantial problem of environmental degradation and, as a consequence, of the vulnerability of large groups of persons in search of international protection, the issue was completely and deliberately ignored. The concerns related to environmental causes of forced migration were mentioned during the discussion on the Directive on Subsidiary Protection.¹⁹³ Eventually, however, it was decided that the instrument would simply harmonize existing concepts and methods of subsidiary protection in the European Union, drawing on the “best” elements of the member states’ national systems, and would not create a new system of protection per se.¹⁹⁴ It is therefore an instrument of

¹⁹⁰ *Id.* at 474.

¹⁹¹ *Id.* at 477.

¹⁹² McAdam, *supra* note 167, at 3.

¹⁹³ McAdam, *supra* note 169, at 464.

¹⁹⁴ *Id.* at 464–65. As stated by McAdam, the purpose of the Directive on Subsidiary Protection, as set forth in Article 1, is to “lay down minimum standards for the qualification of

compromise and not a comprehensive and systematic analysis of all protection possibilities within international law.¹⁹⁵

Discussions on the “environmental refugee” issue originated in the mid-1980s, and have become increasingly frequent. Thus, the development of such a directive acknowledging the failure of the 1951 Refugee Convention to cope with every situation of forced migration would have provided a good opportunity to consider the issue of environmentally-displaced persons.

c. Conclusion Concerning Complementary Protection in Europe

Rather than creating new obligations incumbent on member states, the Directive on Subsidiary Protection clarifies and codifies existing international and community obligations and practices. Thus, the directive appears to be of limited interest for environmentally-displaced persons, until now overlooked in present instruments. Nonetheless, the expectation of a forthcoming European policy specifically dealing with the issue is not senseless. Firstly, the Directive on Subsidiary Protection provides for minimum standards on complementary protection but does not prevent states from according more favorable conditions, leaving certain points entirely to the discretion of member states.¹⁹⁶ Thus, the European Council on Refugees and Exiles advocates for lobbying national decision makers to implement the directive in a way which is conducive to higher standards or provides for necessary legal and other safeguards.¹⁹⁷ As far as environmentally-displaced persons are concerned, however, an extensive interpretation of the directive may not reasonably include this category of displaced persons.

The Directive on Subsidiary Protection remains subject to amendments deemed “necessary.”¹⁹⁸ The issue of environmentally-

third country nationals or stateless persons as refugees or as persons who otherwise need international protection and the content of the protection granted.” *Id.* 466–67. The directive is “based on existing international and EC obligations and current Member State practice.” *Id.* at 464–65.

¹⁹⁵ *Id.* at 465.

¹⁹⁶ Directive on Temporary Protection, *supra* note 164, art. 3(5) (“The directive shall not affect the prerogative of the Member States to adopt or retain more favourable conditions for persons covered by temporary protection.”).

¹⁹⁷ See European Council on Refugees & Exiles, *supra* note 164 (providing the ECRE’s position on the Directive on Subsidiary Protection provisions).

¹⁹⁸ Directive on Subsidiary Protection, *supra* note 165, art. 37.

1. By April 10 2008, the Commission shall report to the European Parliament and the Council on the application of this Directive and shall propose any amendments that are necessary. These proposals for amendments shall be made by way of priority in relation to articles 15, 26 and 33. Member States shall send the Commission all the information that is appropriate for drawing up that report by Oct. 10, 2007. 2. After presenting the report, the Commission shall report to the European Parliament and the Council on the application of this Directive at least every five years.

Id.

displaced persons is increasingly the object of discussion, and could therefore become a central element of forthcoming instruments. Whether incorporated within the framework of the Directive on Subsidiary Protection or addressed through the creation of a separate instrument, there is a legal basis for the protection of environmentally-displaced persons. Incorporating the protection of environmentally-displaced persons in the existing directive or in a separate document would find a legal basis in the European instruments and fulfill the objective of a common asylum system based on minimum protection standards. The existing forms of complementary protection are based on Article 63 of the treaty establishing the European Community, which requires the European Union Council of Ministers to adopt minimum standards for granting temporary protection to displaced persons who need international protection.¹⁹⁹

2. Complementary Protection in the United States: The Uncertain Protection of Environmentally-Displaced Persons

In the recent past, natural disasters of unparalleled proportions have triggered the need to reevaluate and reexamine immigration policies not adequately dealing with the issue. As a result, the United States enacted the Immigration Act of 1990 (IMMACT),²⁰⁰ which sets forth a regime of temporary protection. Temporary Protected Status (TPS) is granted to eligible nationals of a country where:

- 1) There is an ongoing armed conflict, and requiring return would pose a serious threat to personal safety; 2) There has been an earthquake, flood, drought, epidemic, or other environmental disaster resulting in a substantial, but temporary, disruption of living conditions; the foreign State is unable, temporarily, to handle adequately the return of its nationals; and the foreign State officially has requested temporary protection for its nationals in the United States; or 3) There exist extraordinary and temporary conditions that prevent nationals from returning in safety, unless the Attorney General finds that permitting the aliens to remain temporarily is contrary to the national interest.²⁰¹

TPS designation is a purely discretionary decision, but once established, the status applies to all the residents of that country (or a region of that country that is so designated) who arrive in the United States before a date specified by the Attorney General.²⁰² At the present time, the United States has granted TPS to inhabitants of Montserrat,²⁰³ Honduras, and Nicaragua²⁰⁴ because of

¹⁹⁹ Consolidated Version of the Treaty Establishing the European Community, 2002 O.J. (C 325) 58, 59, *available at* http://europa.eu.int/eur-lex/en/treaties/dat/C_2002325EN.003301.html

²⁰⁰ Immigration Act of 1990, Pub. L. No. 101-649, 104 Stat. 4978 (codified as amended in scattered sections of 8 U.S.C.).

²⁰¹ Immigration and Nationality Act, 8 U.S.C. § 1254a(b)(1) (2000).

²⁰² *Id.* § 1254a(b)(1), (c)(1)(A).

²⁰³ Montserrat was touched by a volcanic eruption in August 1997. Between August 22, 1997 and August 22, 1999, 300 habitants from Montserrat were granted TPS. *See* Susan Martin, Andy

environmental disasters that have substantially disrupted living conditions, as a result of which those nations were unable, temporarily, to handle adequately the return of their nationals.

Certainly, “by allowing them to remain longer, the United States gives the affected nations time to cope with destabilizing conditions and rebuild, rather than overwhelm them with more people to care for.”²⁰⁵ Yet, to be eligible for TPS, a person needs to be already in the United States on the date of designation.²⁰⁶ Thus, TPS is not used to provide protection to persons directly affected by an environmental catastrophe who as a result try to migrate, and in any case, it is not meant to facilitate the admission of persons from outside the United States.²⁰⁷ Moreover, TPS is valid for a maximum of six months, although it may be extended for up to eighteen months if the secretary determines that sufficient conditions exist to trigger TPS.²⁰⁸ Thus, the protection accorded does not lead to permanent residence. Once it expires, beneficiaries resume their prior immigration status (or any other status granted while a beneficiary of TPS).²⁰⁹ In practice, however, permanent residence may be accorded, yet the law foresees “strict procedures for allowing those protected to become permanent residents.”²¹⁰ Accordingly, the rights and entitlements recognized are limited. The persons protected are allowed to work during the period the status is in effect,²¹¹ but they may be deemed ineligible for public assistance by states and localities.²¹² Moreover, individuals granted TPS cannot apply for the admission of their spouses or children.²¹³

TPS reflects the international obligation of *non-refoulement*, protecting persons who have entered the United States and who would face life-

Schoenholtz & Deborah Waller Meyers, *Temporary Protection: Towards a New Regional and Domestic Framework*, 12 GEO. IMMIGR. L.J. 543, 550 (1998) (discussing TPS and arguing for a more expansive use of that designation); see also Shazneen Rabadi, *Developments in the Executive Branch*, 13 GEO. IMMIGR. L.J. 137, 138 (1998) (outlining a Federal Register entry extending Montserrat's designation under the TPS program). Rabadi notes that the Attorney General has extended Montserrat's designation under the TPS program. Extension of Designation of Montserrat Under Temporary Protected Status Program, 63 Fed. Reg. 45,864, 45,864–65 (Aug. 27, 1998) (stating that there is ongoing difficulty related to the volcanic eruption and extending TPS designation by 12 months).

²⁰⁴ Honduras and Nicaragua have been particularly affected by Hurricane Mitch. Andrew I. Schoenholtz & Thomas F. Muther, *Immigration and Nationality*, 33 INT'L LAW. 517, 521 (1999). In response to the devastating impact of Hurricane Mitch and to requests from Central American governments, the Clinton Administration granted temporary protection to some 150,000 Hondurans and Nicaraguans. *Id.*

²⁰⁵ *Id.* at 521.

²⁰⁶ *Id.* at 549.

²⁰⁷ *Id.* at 522.

²⁰⁸ *Id.*

²⁰⁹ Jane McAdam, *supra* note 167, at 18.

²¹⁰ Martin, Schoenholtz, & Meyers, *supra* note 196, at 549; 8 U.S.C. § 1254a(h)(2) (2000).

²¹¹ 8 U.S.C. § 1254a(a)(1)(B), (a)(2) (2000).

²¹² Martin, Schoenholtz & Meyers, *supra* note 196, at 549; 8 U.S.C. § 1254a(f)(2) (2000).

²¹³ See Temporary Protected Status for Nationals of Designated States, 8 C.F.R. § 244.2(b) (2006) (requiring the applicant to be “continuously physically present in the United States since the effective date of the most recent designation of that foreign state”).

threatening circumstances if they returned home. Nonetheless, it “raises concerns since it permits the deportation of individuals who entered after the cutoff date, even though they would face substantially similar circumstances in the home country as would be faced by those granted protection.”²¹⁴

D. Proposed International Regime of Complementary Protection Specifically Dealing with Environmentally-Displaced Persons

The existing refugee structure and current refugee norms are not a panacea to protect environmentally-displaced persons in a systematic fashion. First and foremost, environmentally-displaced persons do not fit neatly within the refugee definition. Likewise, the existing forms of complementary protection do not properly address the plea of environmentally-displaced persons. Although in theory some persons who are forced to leave their country of origin, partly because of environmental reasons, may receive refugee status or complementary protection, some authors express concern about such an outcome. Dana Zartner Falstrom, for instance, points out that an appropriate remedy to the issue must address both the cause of the problem (environmental issues) and the result (environmental refugees).²¹⁵ Yet the 1951 Refugee Convention and the complementary forms of protection presently existing, while addressing the result, do not consider the cause of the problem.²¹⁶ As a matter of course, “[m]erely allowing environmentally-displaced individuals to move does not solve the problem. Not only is their homeland continually decimated, but also the massive influx of environmental refugees to other areas creates a vicious cycle of environmental problems in these new areas.”²¹⁷

Nevertheless, Falstrom does not criticise the arguments advanced by her fellow scholars without making her own contribution in pursuing a remedy to the problem of environmentally-displaced persons. Following the framework of the Convention Against Torture and Other Cruel, Inhuman and Degrading Treatment or Punishment (Convention Against Torture),²¹⁸ she advocates the elaboration of a new document that would focus not only on protecting those individuals who are forced to leave their homes due to environmental displacement, but also would require specific obligations from state parties to prevent the root causes from occurring.²¹⁹ As with the Convention Against Torture, she suggests that states “offer temporary protection to those fleeing from environmental problems, and also assume obligations and duties in order to solve these problems within their own jurisdictions, thus preventing the creation of environmental refugees from

²¹⁴ Martin, Schoenholtz & Meyers, *supra* note 196, at 549.

²¹⁵ Falstrom, *supra* note 9, at 2.

²¹⁶ *Id.*

²¹⁷ *Id.*

²¹⁸ Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, Dec. 10, 1984, 1456 U.N.T.S. 85 [hereinafter Convention Against Torture].

²¹⁹ Falstrom, *supra* note 9, at 21.

the start.”²²⁰ She affirms that sufficient evidence of support for a new convention governing environmentally-displaced persons already exists in international treaty law and customary international law, and can provide the necessary sense of state obligation for a new treaty to succeed.²²¹

This Article has explained that complementary protection reflects international obligations such as the obligation of *non-refoulement*, as expressed in Article 3 of the Convention Against Torture. Those provisions are applied to involuntarily-displaced persons who do not meet the refugee definition but are in need of international protection for the reasons enumerated in the different instruments on complementary protection. Likewise, the moral and legal obligation to protect and not to expose people to inhuman treatments could provide the base for a model of protection dealing specifically with the issue of environmentally-displaced persons. After analyzing the Convention Against Torture, the Article assesses Falstrom’s argument to elaborate a convention addressing the specific issue of environmentally-displaced persons in the same fashion.

The Convention Against Torture sets forth both rights for individuals and affirmative obligations for signatory states.²²² Interestingly, the convention applies to persons who fear torture, regardless of whether the person has committed a crime or entered a country illegally. Moreover, it does not require that torture, cruel, inhuman, or degrading punishments be based on race, religion, nationality, membership in a particular social group, or political opinion. The obligation for the state not to repress those persons is, however, temporary and lasts only as long as the threat of torture exists.²²³ Falstrom exposes the assets of the Convention Against Torture, an instrument with extensive provisions protecting individuals and requiring positive acts from states, supervised by the convention body entitled to require reports and to investigate.²²⁴ She emphasises that “the Convention Against Torture is one of the most widely ratified and widely implemented treaties in international human rights law,”²²⁵ and stresses that “the explicit purpose of the Convention Against Torture, coupled with its clear provisions

²²⁰ *Id.* at 2.

²²¹ *Id.* at 2–3.

²²² *Id.* at 20. Not only does the Convention Against Torture acknowledge that torture, and other cruel, inhuman, and degrading punishments are a human rights violation, but also it urges states to take affirmative action in order to prevent and remedy those human rights violations. *Id.* Article 2 requires states to take “legislative, administrative, judicial, or other measures to prevent acts of torture within its territory”; Article 3 prohibits a state from returning any individual to a state where it is likely (s)he will suffer those treatments; Article 4 requires states to make all acts of torture offences under the state’s domestic criminal law; Article 12 requires a “prompt and impartial investigation” of any possible acts of torture; and Article 14 requires states to ensure that victims of torture have adequate means of redress. *Id.* (citing Convention Against Torture, *supra* note 211, arts. 2, 3, 4, 12, 14). Eventually, the convention requires states to undertake educational and training initiatives to ensure that tortuous acts are not being committed by individuals within its territory. Falstrom, *supra* note 8, at 20 (citing Convention Against Torture, *supra* note 211, arts. 10–12).

²²³ Falstrom, *supra* note 9, at 19.

²²⁴ Convention Against Torture, *supra* note 211, arts. 17–24; Falstrom, *supra* note 9, at 20.

²²⁵ Falstrom, *supra* note 9, at 20.

enumerating specific obligations States must satisfy and protections they must provide, as well as the support the prohibition enjoys from customary international law and the law of nations make the Convention very effective.”²²⁶ Eventually she concludes that “the positive features of the Convention Against Torture can be emulated in a new document protecting environmentally displaced persons.”²²⁷

For the purpose of a convention addressing the specific issue of environmentally-displaced persons, “an environmentally-displaced person is an individual forced to leave his or her home due to environmental reasons.”²²⁸ States would have the obligation, on a temporary basis, to take legislative, administrative, judicial, or any other necessary action to protect these people who arrive in their territory because of any of the listed environmental problems.²²⁹ Falstrom does not advocate for permanent residency. Instead, she states that “once the basis for the protection has ended, the State may reexamine the case and return the person to his or her home if it is deemed safe.”²³⁰ First, she argues that “[t]his solution avoids one of the problems posed by the proponents for including environmentally displaced persons under existing refugee protections: States are more likely to assist victims of environmental degradation and disaster if it is seen as a temporary protection, rather than a permanent resettlement.”²³¹ More importantly, the proposed convention establishes a temporary protection regime that would only come to an end once the reasons that compelled the person to flee his or her country of origin have ceased to exist, thereby circumventing the concerns posed at the present time by the limits established in months.²³²

Furthermore, “[t]his proposed Convention on the Protection of Environmentally Displaced Persons would address the root cause of the migration.”²³³ Indeed, “[a]s in the Convention Against Torture, the Convention on the Protection of Environmentally Displaced Persons should incorporate extensive provisions outlining State responsibility to find, correct, and prevent occurrences of the environmental degradation and destruction that force people to migrate.”²³⁴ Eventually, she proposes that

²²⁶ *Id.* at 21.

²²⁷ *Id.*

²²⁸ Falstrom, *supra* note 9, at 22.

²²⁹ Falstrom proposes a provision that would read as follows: “No State Party shall expel, return or extradite an environmentally displaced person to any State where there are substantial grounds for believing that he or she would be in danger due to one of the environmental problems listed in this Convention.” *Id.*

²³⁰ *Id.*

²³¹ *Id.*

²³² See *infra* note 199 and accompanying text (discussing the TPS limits).

²³³ Falstrom, *supra* note 9, at 23.

²³⁴ *Id.* at 23. Falstrom further provides practical examples of how to act responsibly in order to prevent environmental degradation:

For example, the new Convention could include provisions requiring all State parties to ensure that acts of environmental sabotage (as in the case of the oil companies in Nigeria) are made illegal under domestic law. Each State party could be required to

“the new Convention . . . establish an oversight body, reporting mechanisms, dispute resolution procedures, and sanction provisions to encourage active compliance by all State parties.”²³⁵

In order to support her proposition, Falstrom refers to sources of international conventional and customary law underlying protection of environmentally-displaced persons.²³⁶ She enumerates the various instruments adopted over the past decades “for the purpose of protecting the environment, reducing environmental damage, and protecting the rights of persons living within the environment.”²³⁷ Like many authors, including Lynn Berat,²³⁸ Falstrom argues that rights related to the environment are customary international law, lending credence to the need to protect environmentally-displaced persons.

Protection of environmentally-displaced persons may be implied from the provisions enshrined in several instruments of paramount importance setting the basic human rights. In particular, Article 3 of the Universal Declaration of Human Rights proclaims that “[e]veryone has the right to life, liberty and the security of person.”²³⁹ Whereas Article 25 of the Universal Declaration of Human Rights provides that

[e]veryone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness . . . or other lack of livelihood in circumstances beyond his control.²⁴⁰

Although some authors advance that from these provisions may be inferred an obligation for states to protect environmentally-displaced

provide education and information to rural farmers regarding sustainable agriculture and conservation of water. States would be required to closely regulate those who sell pesticides and other toxic materials to ensure that the products are being used correctly and safely. States could also be required to set up strict regulations and guidelines for hazardous industries such as nuclear plants, which can create widespread environmental harms if operated improperly. Education, oversight, and inspection would be required for such industries. Moreover, individuals living within a certain radius of these types of operations should be educated about the dangers and the proper response should a problem arise. The list could go on, but the general idea would be to require and encourage States to strengthen their existing mechanism or create a mechanism to inform and educate their populations to prevent environmental disasters and degradation before they start.

Id.

²³⁵ *Id.*

²³⁶ *Id.* at 24.

²³⁷ *Id.*; see also *id.* at n.88 (providing a list of such instruments).

²³⁸ Lynn Berat, *Defending the Right to a Healthy Environment: Toward a Crime of Genocide in International Law*, 11 B.U. INT'L L.J. 327, 329 (1993).

²³⁹ Universal Declaration of Human Rights, G.A. Res. 217A, art. 3, U.N. GAOR, 3d Sess., 1st plen. mtg., U.N. Doc. A/810 (Dec. 12, 1948); see also Michelle Leighton Schwartz, *International Legal Protection for Victims of Environmental Abuse*, 18 YALE J. INT'L L. 355, 361–64 (1993) (discussing the right to life as one of the human rights threatened by environmental problems).

²⁴⁰ Universal Declaration of Human Rights, *supra* note 239, art. 25.

persons.²⁴¹ Falstrom argues that these instruments reflect the international awareness of environmental issues and accordingly the willingness to remedy them, but do not in themselves affirm such positive obligation for states.²⁴² Indeed, she posits that these provisions “can be used to test international support, [for the obligation of states to protect environmentally displaced persons] and lead to the formulation of a separate, cohesive document based on the belief that protecting the environment to prevent persons from being displaced from their homes has become a principle of customary international law.”²⁴³

Falstrom acknowledges that the elaboration of such an instrument, recognizing the rights of environmentally-displaced persons, will require time and energy.²⁴⁴ Her proposition is nonetheless more than praiseworthy as it contributes to a vivid dialogue on the issue and provides constructive remedy. The hurdles related to the cost of implementation and compliance may be problematic. Yet, UN Agencies, in particular the UNHCR, nongovernmental organizations, and even states may provide humanitarian assistance to environmentally-displaced persons. At the present time, UNHCR has developed a program to provide assistance to states who take in environmentally-displaced persons.²⁴⁵ Of particular concern for UNHCR is the issue of environmental degradation in the host country as a consequence of mass displacement. Hence, UNHCR has elaborated guidelines to safeguard the environment around refugee operations and to encourage management of natural resources with a view to long-term sustainability.²⁴⁶

In addition to working towards confining the impact of environmentally-displaced persons in the receiving country, UNHCR assists states with rehabilitation and cleanup operations.²⁴⁷ Some authors recommend that UNHCR further assist countries with the costs of supporting these refugees, and preventing environmental disasters that cause the displacement. Examples of solidarity funds already exist, but should be more widely acknowledged in order to inspire other similar initiatives. For instance, in February 1997, following a conference on population movements in the Commonwealth of Independent States, organizations such as UNHCR and the International Organization for

²⁴¹ Cooper, *supra* note 11, at 489–93. She argues that “[t]he comprehensive language of these provisions can be interpreted as setting broad environmental standards and creating an implicit human right to freedom from life-threatening and otherwise intolerable environmental conditions.” *Id.* (citing Schwartz, *supra* note 232, at 361–64, 367, 367 n.68 (listing articles 12, 17, 23, and 27 of the Universal Declaration of Human Rights as embodying human rights which may be violated by environmental threats)). Hence, Cooper posits that “this human right to freedom from intolerable environmental degradation ought to command protection” under the Refugee Convention. *Id.* at 492.

²⁴² Falstrom, *supra* note 9, at 23–26.

²⁴³ *Id.* at 25. See generally Maria Stavropoulou, *The Right Not to Be Displaced*, 9 AM. U. J. INT’L L. & POL’Y 689, 706–35 (1994) (discussing the current state of international law with respect to displacement of persons, and identifying the human rights violated by displacement).

²⁴⁴ Falstrom, *supra* note 9, at 27.

²⁴⁵ *Id.*

²⁴⁶ *Id.* at 28 n. 101.

²⁴⁷ *Id.*

Migration issued an appeal for funds for the purpose of the “resettlement and integration of environmental migrants in the Central Asian States.”²⁴⁸ In 1997, UNHCR stated that “[d]onor states and international organisations [had] also taken a particular interest in the Aral Sea basin, although the environmental problems in that area [were] so extreme that remedial and preventive activities [would] be required for many years to come.”²⁴⁹ In 2006, however, a newspaper article was titling the renaissance of the Aral Sea thanks to the construction of a dam.²⁵⁰ The article explains that the Aral Sea lost seventy-five percent of its volume due to poorly designed and badly managed projects diverting the two main rivers pouring into the sea in order to irrigate cotton plantations in Central Asia.²⁵¹ Yet the World Bank and the government of Kazakhstan set up a project of dam construction, fostering the rise of the small Aral Basin and as a consequence the return of inhabitants previously living from the activities of the sea.²⁵² The project illustrates how international cooperation may remedy or reduce the adverse consequences of environmental degradation and therefore enable people to return to the area in which they were previously living. The Aral Sea was declared dead, forcing thousands of people to flee in search of an environment that could sustain their life; today the area is repopulated.

V. CONCLUSION

Although the international community acknowledged the correlation between environmental degradation and human rights violations years ago, the present set of international norms related to the environment do not address the situation of environmentally-displaced persons. Considering the blatant vulnerability of these persons, the failure of international law to address the issue is of great concern. The propositions advanced in pursuing a remedy to the problem of environmentally-induced migrations are rare, but some of them are nonetheless invaluable because they present practical and feasible means of protection.

Reflecting the purpose of the instruments on complementary protection, namely to provide protection to persons in need of international protection who do not meet the criteria of the 1951 Refugee Convention, Falstrom proposes a convention addressing the specific issue of environmentally-induced migration.²⁵³ The convention would be elaborated

²⁴⁸ United Nations High Comm’r on Refugees, *Humanitarian Codes of Conduct*, in THE STATE OF THE WORLD’S REFUGEES 1997: A HUMANITARIAN AGENDA, ch. 1 (1997), available at <http://www.unhcr.org/publ/PUBL/3eb789912.pdf>.

²⁴⁹ *Id.* ch. 1 box 1.2. See generally Philip P. Micklin, *Desiccation of the Aral Sea: A Water Management Disaster in the Soviet Union*, 241 SCI. 1170 (1988) (describing the environmental deterioration and economic impact due to the desiccation of the Aral Sea, as well as some possible steps to restore water inflows to the Aral).

²⁵⁰ Ilan Greenberg, *As a Sea Rises, So Do Hopes for Fish, Jobs and Riches*, N.Y. TIMES, Apr. 6, 2006, at A4.

²⁵¹ *Id.*

²⁵² *Id.*

²⁵³ Falstrom, *supra* note 9, at 18–28.

in a similar fashion to the Convention Against Torture. Interestingly, not only does the Convention Against Torture reassert the obligation of *non-refoulement*, the essential element of instruments on international protection, but also it provides an extensive set of rights and obligations, combined with an elaborated mechanism of implementation, that has proven to be effective to protect individuals against torture.²⁵⁴

The proposition to adapt these provisions to the case of environmentally-displaced persons is particularly praiseworthy. Indeed, Falstrom is one of the few authors to propose a concrete framework to deal with the issue of environmentally-displaced persons.²⁵⁵ The literature on environmental refugees usually discusses whether environmentally-displaced persons fit the refugee definition. As a matter of course, the discussion has lasted for many years and has not proven constructive. Moreover, the proposition to broaden the refugee definition does not address the root causes of the problem, and thereby neglects an important aspect to remedy comprehensively the issue. Although it is not the purpose of the Refugee Convention to make any judgement on the political, economic, and social attributes of foreign countries when receiving nationals from those countries, in the particular case of mass displacement for environmental reasons, addressing the root causes is paramount. Working on projects of sustainable use of the environment may prevent the multiplication of further, and in some circumstances irremediable, mass displacement. Eventually, considering the present dichotomy in international law between refugees and internally-displaced persons, authors supporting the idea that environmental refugees fall under the 1951 Refugee Convention advocate for protection only of those environmental refugees who cross an internationally recognized state border, as this is one of the essential requirements of the refugee definition. Disregarding internally-displaced persons leaves many environmentally-displaced persons without international protection.

This Article has reviewed the problems encountered in protecting environmentally-displaced persons. The particular issue of protecting those environmentally displaced does not, however, pose any major legal or political difficulties. Although it is a pressing issue, it is not a controversial

²⁵⁴ *Id.*

²⁵⁵ Similarly, McCue advocates for the adoption of a convention based on international environmental law principles to cope with environmental migration. McCue, *supra* note 9, 189–90. For a comprehensive catalogue of which instruments include what norms, see generally, Edith Brown Weiss, *Environmental Disasters in International Law*, 1986 ANUARIO JURÍDICO INTERAMERICANO 141 (1987) (discussing ways to minimize damage and provide emergency assistance with international environmental disasters). Professor Weiss has exhaustively researched these principles and noted their use in numerous conventions, treaties and so-called “soft-law” sources from bodies such as the International Legal Association and the World Commission on Environment and Development. *Id.* at 145, 147. Interestingly, the proposed convention would add the migratory effects of environmental events to the responsibility of States under these principles. *Id.* at 146. It would also enhance the development of financial and technical assistance for the particular concern of environmental and population pressures. *Id.* at 145–50.

issue. To the contrary, dealing adequately with the problems related to environmental migration simply requires more rigorously structured and coordinated international action with regard to environmental issues in general, and the protection of environmentally-displaced persons in particular. Moreover, the variety of sources relating the problem of environmental migration reveals the increased interest in the issue, and engenders the belief that the international community may confront the problem in the near future. In this regard, an instrument like the proposed convention provides the assets for a comprehensive remedy of the issues related to environmentally-induced migration, and would be worth further discussion.