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ARTICLE

Bridging the North-South Divide: International Environmental Law in the Anthropocene

CARMEN G. GONZALEZ*

Humanity stands on the precipice of global environmental catastrophe. According to a recent study published in the journal *Science*, the global economy has already transgressed four of the nine planetary boundaries critical to the planet's self-regulating capacity.¹ Climate change, deforestation, species extinction, and the runoff of phosphorus and nitrogen into regional watersheds and oceans have exceeded safe biophysical thresholds, laying the groundwork for an increasingly dangerous, unpredictable, and unstable environment inconsistent with a flourishing society.² Scientists refer to the current geologic era of human-induced environmental change as the Anthropocene.³

The environmental crisis coincides with widespread poverty and growing economic inequality. According to a recent report by

* Professor of Law, Seattle University School of Law. This article presents, in abbreviated form, some of the ideas explored in greater depth in a forthcoming edited volume on international environmental law and the global South. The volume traces the North-South divide in international law from the colonial period to the present, examines North-South conflicts in a number of significant areas of environmental concern (including food, energy, water, indigenous rights, biodiversity, climate change, trade, and investment), and explores strategies to bridge the divide. See INTERNATIONAL ENVIRONMENTAL LAW AND THE GLOBAL SOUTH (Shawkat Alam, Sumudu Atapattu, Carmen G. Gonzalez, & Jona Razzaque, eds., forthcoming 2015).

1. See generally Will Steffen et al., *Planetary Boundaries: Guiding Human Development on a Changing Planet*, 347 SCI. 791 (2015) (using the framework of planetary boundaries to explain the need for a new conception of human development in the face of climate change and other environmental challenges).

2. See *id.*

3. See Paul J. Crutzen, *Geology of Mankind*, 415 NATURE 23, 23 (2002).

Oxfam, twenty percent of the world's population currently owns approximately ninety-five percent of the planet's wealth.⁴ If current trends continue, the richest one percent of the world's population will control a larger share of the world's wealth by 2016 than the remaining ninety-nine percent.⁵ As inequality grows and the environment deteriorates, billions of people in the global South struggle to satisfy basic human needs. Nearly 750 million people are unable to obtain clean drinking water, and 2.5 billion people lack access to sanitation.⁶ Approximately 805 million people suffer from chronic undernourishment because they lack the resources to grow or purchase sufficient food to satisfy their dietary energy needs.⁷ Another 2.6 billion people lack modern energy for cooking, heating, lighting, transportation, or basic mechanical power.⁸

International environmental law has generally failed to halt or reverse the rapid deterioration of the planet's life support systems.⁹ Conflicts between affluent and poor countries (the North-South divide) over environmental priorities, the allocation of responsibility for environmental harm, and the relationship between environmental protection and economic development have generated gridlock in environmental treaty negotiations, as well as inadequate compliance with existing agreements.¹⁰ For

4. See DEBORAH HARDOON, OXFAM INT'L, *WEALTH: HAVING IT ALL AND WANTING MORE* 2 (2015), available at https://www.oxfam.org/sites/www.oxfam.org/files/file_attachments/ib-wealth-having-all-wanting-more-190115-en.pdf, archived at <https://perma.cc/AHK5-JJB8>.

5. See *id.*

6. See WORLD HEALTH ORG. (WHO) & UNITED NATIONS CHILDREN'S FUND (UNICEF), *PROGRESS ON DRINKING WATER AND SANITATION 2014 UPDATE* 8 (2014), available at http://www.who.int/water_sanitation_health/publications/2014/jmp-report/en/, archived at <http://perma.cc/W9T9-5JLA>.

7. See UNITED NATIONS FOOD & AGRIC. ORG. (FAO), *THE STATE OF FOOD INSECURITY IN THE WORLD: STRENGTHENING THE ENABLING ENVIRONMENT FOR FOOD SECURITY AND NUTRITION* 4 (2014), available at <http://www.fao.org/3/a-i4030e.pdf>, archived at <http://perma.cc/G5AW-MG5Z>.

8. See INT'L ENERGY AGENCY (IEA), *WORLD ENERGY OUTLOOK 2012*, at 51 (2012), available at http://www.iea.org/publications/freepublications/publication/WEO2012_free.pdf, archived at <http://perma.cc/Q82R-8JFM>.

9. See JONATHAN C. CARLSON ET AL., *INTERNATIONAL ENVIRONMENTAL LAW AND WORLD ORDER: A PROBLEM-ORIENTED COURSEBOOK* 293 (3d ed. 2012).

10. See *generally* RUCHI ANAND, *INTERNATIONAL ENVIRONMENTAL JUSTICE: A NORTH-SOUTH DIMENSION* (2004) (analyzing North-South dynamics over climate change, ozone depletion, and the hazardous waste trade); PATRICIA BIRNIE ET AL., *INTERNATIONAL LAW AND THE ENVIRONMENT* 2-31 (Oxford Univ. Press, 3d ed.

example, the North has historically emphasized environmental problems of global concern (such as ozone depletion and species extinction), whereas the South has generally prioritized poverty alleviation and environmental problems with more direct impacts on vulnerable local populations (such as desertification, food security, the hazardous waste trade, and access to safe drinking water, sanitation, and energy).¹¹ Southern countries have demanded that the North assume responsibility for its immense contribution to major environmental problems (such as climate change), but the North has only grudgingly accepted the principle of common, but differentiated, responsibility on the basis of its superior technical and financial resources while disavowing responsibility on the basis of its historic contributions to these crises.¹² In almost every area of environmental concern, North-South negotiations have featured a deep and growing chasm between the call by some Northern states for collective action to protect the environment and the South's demand for social and economic justice.¹³

Of course, the North-South divide is not the only obstacle to international environmental cooperation. Conflicts between powerful Southern countries (such as China and India) and more ecologically vulnerable nations (such as the small island states) have also compromised international environmental negotiations, most notably in the case of climate change.¹⁴ The acquisition of

2009); PHILIPPE SANDS ET AL., *PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW* 22-49 (2012); David B. Hunter, *International Environmental Law: Sources, Principles, and Innovations*, in *ROUTLEDGE HANDBOOK OF GLOBAL ENVIRONMENTAL POLITICS* 124, 124-37 (Paul G. Harris ed., 2010).

11. See ANAND, *supra* note 10, at 6; Carmen G. Gonzalez, *Beyond Eco-Imperialism: An Environmental Justice Critique of Free Trade*, 78 DENV. U. L. REV. 979, 1008-09 (2001) [hereinafter Gonzalez, *Beyond Eco-Imperialism*].

12. See Carmen G. Gonzalez, *Environmental Justice and International Environmental Law*, in *ROUTLEDGE HANDBOOK OF INTERNATIONAL ENVIRONMENTAL LAW* 77, 91-92 (Shawkat Alam et al. eds., 2013) [hereinafter Gonzalez, *Environmental Justice*].

13. See Usha Natarajan & Kishan Khoday, *Locating Nature: Making and Unmaking International Law*, 27 LEIDEN J. INT'L L. 573, 579 (2014).

14. See generally Sander Happaerts & Hans Bruyninckx, *Rising Powers in Global Climate Governance: Negotiating in the New World Order* 15 (Leuven Ctr. for Global Governance Studies, Working Paper No. 124, 2013), available at https://ghum.kuleuven.be/ggs/publications/working_papers/new_series/wp121-130/wp124-happaerts-bruyninckx-finaal.pdf, archived at <https://perma.cc/RMH9-77HY>.

agricultural lands in Asia, Africa, and Latin America by middle-income Southern nations for offshore food and biofuels production (a phenomenon known as land grabbing) has likewise generated South-South tensions.¹⁵ The United States and the European Union have clashed over climate policy and over the regulation of toxic chemicals and genetically modified organisms.¹⁶

This article calls for a fundamental reorientation of international environmental law to bridge the North-South divide and respond to the ecological crises of the Anthropocene. Such a reconceptualization of international environmental law must be normatively grounded in respect for nature and in the quest for environmental justice within, as well as between, countries.

International environmental law must directly challenge the relentless drive toward economic expansion and unbridled exploitation of people and nature rather than merely attempt to mitigate its excesses. An essential step toward such a reconceptualization is to examine the ways in which international law has historically engaged with nature and with the peoples of the global South in order to identify the policies and practices that subordinate the South and hasten the destruction of the planet's ecosystems.

The article proceeds in four parts. Part I examines the colonial and post-colonial origins of the North-South divide. Part II analyzes the role of international economic law in perpetuating unsustainable and inequitable patterns of production and consumption. Part III argues that sustainable development has failed to challenge the dominant, growth-oriented economic paradigm at the core of the ecological and economic crisis. Finally, Part IV discusses the way forward.

15. See generally Tomaso Ferrando, *Land Grabbing Under the Cover of Law: Are BRICS-South Relationships Any Different?* 7 (Sept. 2, 2014) (unnumbered working paper), available at <http://www.tni.org/briefing/land-grabbing-under-cover-law>, archived at <http://perma.cc/6S2B-RJN3>.

16. See generally David E. Adelman, *A Cautiously Pessimistic Appraisal of Trends in Toxics Regulation*, 32 WASH. U. J.L. & POL'Y 377, 377-79 (2010); Jutta Brunnee, *Europe, the United States, and the Global Climate Regime: All Together Now?*, 24 J. LAND USE & ENVT'L L. 1, 1-2 (2008); Carmen G. Gonzalez, *Genetically Modified Organisms and Justice: The International Environmental Justice Implications of Biotechnology*, 19 GEO. INT'L ENVT'L L. REV. 583, 584-86 (2007).

I. THE COLONIAL AND POST-COLONIAL ORIGINS OF THE NORTH-SOUTH DIVIDE

The origins of the North-South divide lie in colonialism. The colonial encounter devastated the indigenous civilizations of Asia, Africa, and the Americas, and enabled Europeans to appropriate and exploit their lands, labor, and natural resources.¹⁷ Colonialism converted self-reliant subsistence economies into outposts of Europe that exported agricultural products, minerals, and timber, and imported manufactured goods.¹⁸ Mining, logging, and cash-crop production destroyed forests, dispossessed local communities, and dramatically altered the ecosystems of the colonized territories.¹⁹

International law justified the colonial enterprise by constructing native populations as racially and culturally inferior and by asserting a moral duty to “civilize” them through compulsory assimilation to European ways.²⁰ Influenced by Enlightenment scholars and philosophers, international law decreed the domination of nature and the development of industry as the key obligations of civilized states.²¹ Societies that lived in harmony with nature were pronounced “uncivilized” and in need of “modernization” and “development.”²²

Colonialism universalized European notions of nature as a commodity for human exploitation while creating a global economy that systematically subordinated the global South. For example, post-colonial states in Asia, Africa, and Latin America were integrated into the Northern-dominated world economy as

17. See CLIVE PONTING, *A GREEN HISTORY OF THE WORLD: THE ENVIRONMENT AND THE COLLAPSE OF GREAT CIVILIZATIONS* 130-36 (1991).

18. See *id.* at 194-212.

19. See Kate Miles, *International Investment Law: Origins, Imperialism and Conceptualizing the Environment*, 21 COLO. J. INT’L ENVTL. L. & POL’Y 1, 21-22 (2010).

20. See generally ANTONY ANGHIE, *IMPERIALISM, SOVEREIGNTY AND THE MAKING OF INTERNATIONAL LAW* (2005) (arguing that the colonial encounter and the subordination of non-European peoples played a central role in the evolution of international law).

21. See Alex Geisinger, *Sustainable Development and the Domination of Nature: Spreading the Seed of the Western Ideology of Nature*, 27 B.C. ENVTL. AFF. L. REV. 43, 52-58 (1999); Natarajan & Khoday, *supra* note 13, at 586-87.

22. See VASSOS ARGYROU, *THE LOGIC OF ENVIRONMENTALISM: ANTHROPOLOGY, ECOLOGY AND POSTCOLONIALITY* 7-26 (2005).

exporters of primary commodities and importers of manufactured products.²³ Because the terms of trade consistently favored manufactured goods over primary products, the nations of the global South were required to export increasing amounts of their output in order to acquire the same amount of manufactured goods.²⁴ Efforts to boost national earnings by increasing the production of minerals, timber, and agricultural products generally glutted global markets with primary commodities and depressed prices, thereby reducing Southern export earnings, exacerbating Southern poverty, and reinforcing the North-South economic divide.²⁵

The North's control over a large part of the world's resources from the colonial era to the present fueled the North's industrial development and enabled the North to maintain levels of consumption far beyond the limits of its own natural resource base.²⁶ As historian Clive Ponting observes, "[m]uch of the price of that achievement was paid by the population of the Third World in the form of exploitation, poverty, and human suffering."²⁷

The South's economic dependency on export production enabled the North to exploit Southern resources at prices that did not reflect the social and environmental costs of production.²⁸ Far from producing prosperity, export-led development strategies depleted the South's natural resources, harmed human health, and reinforced social and economic inequality by imposing disparate environmental burdens on the communities targeted for petroleum extraction, mining, and other forms of resource exploitation.²⁹ Much of the environmental degradation in the global South has been caused by export-oriented production to

23. See PONTING, *supra* note 17, at 213-14.

24. See JAMES M. CYPHER, *THE PROCESS OF ECONOMIC DEVELOPMENT* 201 (2014).

25. See PONTING, *supra* note 17, at 223.

26. See *id.*

27. See *id.*

28. See JOAN MARTINEZ-ALIER, *THE ENVIRONMENTALISM OF THE POOR: A STUDY OF ECOLOGICAL CONFLICTS AND VALUATION* 214 (2002).

29. Rebecca M. Bratspies, *Assuming Away the Problem? The Vexing Relationship Between International Trade and Environmental Protection*, in *NON-STATE ACTORS, SOFT LAW AND PROTECTIVE REGIMES: FROM THE MARGINS* 227, 228-30, 239-40 (Cecilia Bailliet ed., 2012).

satisfy the needs and desires of Northern consumers rather than local consumption.³⁰

II. INTERNATIONAL ECONOMIC LAW AND THE NORTH-SOUTH DIVIDE

International economic law intensified the North-South divide and exacerbated the commodification and despoliation of nature. Modern investment law, for example, inherited from the colonial era an instrumentalist view of the environment as an object for Northern exploitation, with no corresponding duty to protect the health of local ecosystems, enhance the well-being of local communities, or advance the goals and interests of the host state.³¹ Thus, contemporary bilateral investment treaties (BITs) and regional investment agreements seek to provide foreign investors with unfettered access to natural resources by restricting the ability of host states to adopt health and safety, environmental, labor, and human rights standards.³² If these social and environmental standards impair the economic value of the investment, they may be challenged as indirect expropriations or breaches of fair and equitable treatment standards.³³ Designed to maintain a stable legal and business environment for foreign investors, these one-sided agreements generally impose no human rights and environmental obligations on foreign investors and provide no mechanism for holding corporations accountable for the harms to human health and the environment that their activities cause in the host state.³⁴

The international trade regime has likewise exacerbated the North-South divide and accelerated environmental degradation. The legal architecture of contemporary globalization was developed in the aftermath of the Second World War when much of the global South remained under colonial rule. The 1947 General Agreement on Tariffs and Trade (1947 GATT)

30. See William E. Rees & Laura Westra, *When Consumption Does Violence: Can There be Sustainability and Environmental Justice in a Resource-Limited World?*, in *JUST SUSTAINABILITIES: DEVELOPMENT IN AN UNEQUAL WORLD* 99, 110 (Julian Agyeman et al. eds., 2003).

31. See Miles, *supra* note 19, at 23-24.

32. See *id.* at 40-44.

33. See *id.* at 40-42.

34. See *id.* at 44.

disproportionately benefited the global North by reducing tariffs on manufactured goods while allowing the North to maintain agricultural subsidies and import barriers that disfavored Southern agricultural producers.³⁵

In the decades following World War II, decolonization movements in the global South liberated most of Asia and Africa from colonial rule. A coalition of Southern states, known as the Group of 77, attempted to reform the international economic system through a series of resolutions at the United Nations General Assembly, where the South held a numerical majority.³⁶ The Group of 77 sought to achieve a more equitable international economic order by advancing the doctrine of permanent sovereignty over natural resources and the right to nationalize the Northern companies exploiting the South's natural resources.³⁷ They mobilized to achieve a New International Economic Order (NIEO) that would enhance Southern participation in global governance, provide debt relief, secure preferential access to Northern markets, and stabilize export prices for primary commodities.³⁸ The Group of 77 also attempted to mitigate the economic legacy of colonialism and promote economic prosperity through differential treatment in international economic law (special and differential treatment) and international environmental law (common but differentiated responsibility).³⁹

The debt crisis of the 1980s marked the demise of the NIEO and the ascendancy of the free market economic model known as the Washington Consensus.⁴⁰ In exchange for debt repayment assistance, the International Monetary Fund (IMF) and the World Bank imposed on heavily indebted Southern nations a

35. See Carmen G. Gonzalez, *Trade Liberalization, Food Security, and the Environment: The Neoliberal Threat to Sustainable Rural Development*, 14 *TRANSNAT'L L. & CONTEMP. PROBS.* 419, 456-57 (2004) [hereinafter Gonzalez, *Trade Liberalization*].

36. See LAVANYA RAJAMANI, *DIFFERENTIAL TREATMENT IN INTERNATIONAL ENVIRONMENTAL LAW* 17-18 (2006).

37. See Ruth E. Gordon & Jon H. Sylvester, *Deconstructing Development*, 22 *WIS. INT'L L.J.* 1, 53-56 (2004).

38. See RAJAMANI, *supra* note 36, at 17-18; Ruth Gordon, *The Dawn of a New, New International Economic Order?*, 72 *LAW & CONTEMP. PROBS.* 131, 142-45 (2009); Gordon & Sylvester, *supra* note 37, at 56-60.

39. See Gonzalez, *Environmental Justice*, *supra* note 12, at 87-92.

40. See Gordon, *supra* note 38, at 145-50.

series of neoliberal economic reforms that included trade liberalization, deregulation, privatization, elimination of social safety nets, and the intensification of export production to service the foreign debt.⁴¹

The export-led economic policies mandated by the IMF and the World Bank exacerbated poverty and inequality, reinforced the South's environmentally and economically disadvantageous dependence on the export of primary commodities, and enabled Northern transnational corporations to dominate many of the newly privatized economic sectors.⁴² Trade liberalization destroyed rural livelihoods in the global South by placing small farmers in direct competition with highly subsidized Northern agribusiness.⁴³ The elimination of social safety nets exacerbated the misery of the poor and resulted in food riots (known as "IMF riots") in many Southern countries.⁴⁴ Under pressure to repay the foreign debt, Southern countries "mined" natural resources to maximize export earnings rather than managing them in a sustainable manner.⁴⁵ Desperate for foreign investment, impoverished Southern nations became magnets for polluting industries and dumping grounds for hazardous wastes from the global North.⁴⁶

The World Trade Organization (WTO) Agreements, which succeeded the 1947 GATT, failed to dismantle the import barriers of greatest concern to the global South (particularly in the areas of agriculture, clothing, and textiles), and yet imposed new and onerous obligations in the areas of intellectual property, investment, and services.⁴⁷ They also required Southern countries to curtail the import barriers that protected nascent Southern industries from more technologically advanced Northern competitors, and restricted the right of Southern

41. See *id.* at 145-50; Gonzalez, *Environmental Justice*, *supra* note 12, at 82.

42. See Gonzalez, *Environmental Justice*, *supra* note 12, at 82.

43. See Gonzalez, *Trade Liberalization*, *supra* note 35, at 466-67.

44. See *id.* at 465-66.

45. See Bratspies, *supra* note 29, at 239.

46. See generally DAVID NAGUIB PELLOW, *RESISTING GLOBAL TOXICS: TRANSNATIONAL MOVEMENTS FOR ENVIRONMENTAL JUSTICE* (2007) (examining the export of hazardous waste from affluent countries to impoverished communities in developing countries).

47. See Frank J. Garcia, *Beyond Special and Differential Treatment*, 27 B.C. INT'L & COMP. L. REV. 291, 297-98 (2004).

countries to deploy tariffs and subsidies to strategically promote dynamic new industries (a practice known as industrial policy).⁴⁸ Economic history reveals that the United States, Germany, Japan, the United Kingdom, Taiwan, and South Korea achieved economic prosperity through protectionism (including industrial policy).⁴⁹ By depriving Southern nations of the tools used by the global North and by certain middle-income Southern states to diversify and industrialize their economies while imposing new requirements to protect the rights of foreign investors and intellectual property holders, international economic law has institutionalized Southern poverty.⁵⁰

48. See YONG-SHIK LEE, RECLAIMING DEVELOPMENT IN THE WORLD TRADING SYSTEM 41-42 (2006).

49. See generally ALICE H. AMSDEN, *ESCAPE FROM EMPIRE: THE DEVELOPING WORLD'S JOURNEY THROUGH HEAVEN AND HELL* (2009) (examining the negative impact of American free market economic policy on developing economies); ALICE H. AMSDEN, *THE RISE OF "THE REST": CHALLENGES TO THE WEST FROM LATE-INDUSTRIALIZING ECONOMIES* (2003) (explaining the important role of government intervention in the post-World War II industrialization of Asia and Latin America); HA-JOON CHANG, *BAD SAMARITANS: THE MYTH OF FREE TRADE AND THE SECRET HISTORY OF CAPITALISM* (2008) (highlighting through case studies the importance of protectionism and government intervention in the achievement of economic prosperity); HA-JOON CHANG, *KICKING AWAY THE LADDER: DEVELOPMENT STRATEGY IN HISTORICAL PERSPECTIVE* (2003) (questioning the benefits of free market economic policies for developing countries); ERIK S. REINERT, *HOW RICH COUNTRIES GOT RICH . . . AND WHY POOR COUNTRIES STAY POOR* (2007) (discussing how rich countries became wealthy through the use of subsidies and economic protectionism to bolster their services and industries). See also Carmen G. Gonzalez, *China in Latin America: Law, Economics, and Sustainable Development*, 40 ENVTL. L. REP. 10171, 10175 (2010) [hereinafter Gonzalez, *China in Latin America*].

50. See Gonzalez, *Environmental Justice*, *supra* note 12, at 88. Proponents of economic liberalization point out that the absolute number of people living in extreme poverty has declined since the advent of free market economic reforms beginning in 1980. However, this reduction in poverty is largely attributable to the rise of China. See SARAH JOSEPH, *BLAME IT ON THE WTO? A HUMAN RIGHTS CRITIQUE* 165-167 (2013). Moreover, China achieved economic prosperity by ignoring the policy prescriptions of the Washington Consensus and using tariffs, import quotas, technology transfer requirements, local content requirements, and aggressive industrial policy to promote economic growth. See Gonzalez, *China in Latin America*, *supra* note 49, at 10174-75. China's defiance of free market orthodoxy and embrace of state-led development (known as the "Beijing Consensus") has been touted as a model for the global South after decades of failed neoliberal economic reforms. See *id.* at 10175. Regrettably, China's economic growth has come at a high environmental cost. China is now facing an environmental crisis of breathtaking proportions while contributing significantly to global environmental problems, including climate change, transboundary air pollution, and the illegal timber trade. See *id.* at 10175-76.

III. SUSTAINABLE DEVELOPMENT: PART OF THE SOLUTION OR PART OF THE PROBLEM?

The root cause of the contemporary ecological crisis is an international economic order premised on unlimited economic growth that impoverishes the global South and facilitates the overconsumption of the planet's resources by its more affluent inhabitants. This economic order reinforces the colonial notion that all societies must evolve through particular stages until they achieve the apex of civilization represented by the global North.⁵¹ It casts development as "the ubiquitous goal of all states and peoples,"⁵² and equates development with rising material consumption.⁵³ Pioneered by Europe and the United States, this economic model has been exported to the global South and imposes ever-increasing demands on the world's finite natural resources and waste sinks.⁵⁴

The unbridled pursuit of economic growth has brought the planet's ecosystems to the brink of collapse. The 2005 United Nations Millennium Ecosystem Assessment Synthesis Report concluded that human economic activity during the previous fifty years produced more severe degradation of the planet's ecosystems than in any prior period in human history.⁵⁵ Some scholars refer to the post-1950 surge of economic activity as the *Great Acceleration* and argue that this period should be regarded as the beginning of the Anthropocene.⁵⁶

The global North, with only eighteen percent of the world's population, is responsible for approximately seventy-four percent

51. See GILBERT RIST, *THE HISTORY OF DEVELOPMENT: FROM WESTERN ORIGINS TO GLOBAL FAITH* 223-24 (1997); Natarajan & Khoday, *supra* note 13, at 588-89; Carmen G. Gonzalez, *Environmental Justice, Human Rights, and the Global South*, 13 SANTA CLARA J. INT'L L. 151, 163-172 (2015) (explaining how international law constructed European economic development models and socio-cultural norms as universal).

52. See Natarajan & Khoday, *supra* note 13, at 588.

53. See JAMES GUSTAVE SPETH, *THE BRIDGE AT THE END OF THE WORLD: CAPITALISM, THE ENVIRONMENT, AND CROSSING FROM CRISIS TO SUSTAINABILITY* 46-51 (2008).

54. See Gonzalez, *China in Latin America*, *supra* note 49, at 10181.

55. See MILLENNIUM ECOSYSTEM ASSESSMENT, *ECOSYSTEMS AND HUMAN WELL-BEING: SYNTHESIS 1* (2005), available at <http://www.millenniumassessment.org/en/Synthesis.html>, archived at <http://perma.cc/MA6W-RXEC>.

56. See generally Will Steffen et al., *The Trajectory of the Anthropocene: The Great Acceleration*, *THE ANTHROPOCENE REV.*, Jan. 2015, 1-18.

of this extraordinary economic expansion.⁵⁷ While the North reaps the material benefits of the *Great Acceleration*, the environmental consequences are borne disproportionately by Southern countries and by the planet's most vulnerable human beings, including indigenous peoples, racial and ethnic minorities, and the poor.⁵⁸ Having industrialized by appropriating the South's natural resources and by using more than its fair share of the global commons for waste disposal, the North's per capita ecological footprint continues to significantly outstrip that of the South.⁵⁹ Scholars and activists have argued that the global North owes an ecological debt⁶⁰ to the countries and peoples of the global South for "resource plundering, unfair trade, environmental damage and the free occupation of environmental space to deposit waste."⁶¹ Indeed, this ecological debt is at the heart of many North-South conflicts in international environmental law.

International environmental law has failed to challenge the fallacy of unlimited economic growth. Although its meaning is highly contested, sustainable development is widely recognized as one of the guiding principles of contemporary international law.⁶² The World Commission on Environment and Development (the Brundtland Commission) defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."⁶³ This definition appeared to reconcile economic

57. See *id.* at 11.

58. See Rees & Westra, *supra* note 30, at 100-03.

59. See *id.* at 109-12.

60. See generally Duncan McLaren, *Environmental Space, Equity and the Ecological Debt*, in JUST SUSTAINABILITIES: DEVELOPMENT IN AN UNEQUAL WORLD 19, 30-32 (Julian Agyeman et al. eds., 2003); Karin Mickelson, *Leading Towards a Level Playing Field, Repaying Ecological Debt, or Making Environmental Space: Three Stories About International Environmental Cooperation*, 43 OSGOODE HALL L.J. 137, 150-54 (2005).

61. ERIK PAREDIS ET AL., THE CONCEPT OF ECOLOGICAL DEBT: ITS MEANING AND APPLICABILITY IN INTERNATIONAL POLICY 7 (2008) (internal quotations and citations omitted).

62. See generally NICO SCHRIJVER, THE EVOLUTION OF SUSTAINABLE DEVELOPMENT IN INTERNATIONAL LAW: INCEPTION, MEANING AND STATUS 24 (2008).

63. See World Commission on Environment and Development (WCED), *Our Common Future*, ch. II, ¶ 1, U.N. Doc. A/42/427, (Aug. 4, 1987) [hereinafter Brundtland Commission].

development and environmental protection without fundamentally challenging the growth-oriented development paradigm.⁶⁴ Indeed, the Brundtland Commission boldly asserted that “[g]rowth has no set limits in terms of population or resource use beyond which lies ecological disaster.”⁶⁵ Instead of encouraging the global North to reduce its ecological footprint in order to increase the living standards of the poor without exceeding biophysical limits, the Brundtland Commission extolled the benefits of international trade as the engine of economic growth and the solution to poverty and inequality.⁶⁶ As Gilbert Rist observes, “[t]he main contradiction, then, in the Report of the Brundtland Commission is that *the growth policy supposed to reduce poverty and stabilize the ecosystem hardly differs at all from the policy which historically opened the gulf between rich and poor and placed the environment in danger.*”⁶⁷ Far from questioning the dominant development model that subordinated the global South and sparked an ecological crisis of epic proportions, sustainable development “naturalize[s] and obfuscate[s] the process whereby some people systematically under-develop others.”⁶⁸

Although the flaws of the growth-at-any-cost economic model are well known, international environmental law has failed to mount a frontal assault on the global economic order or to attack its fundamental assumptions. Environmental treaties repeat the mantra that the poor need economic development without acknowledging ecological limits or the fact that the dominant economic model has increased North-South inequality and widened the gap between the rich and the poor in all nations.⁶⁹ Global environmental degradation has been constructed as an externality to be mitigated and internalized through multilateral

64. See RIST, *supra* note 51, at 193; see generally WOLFGANG SACHS, *Environment*, in THE DEVELOPMENT DICTIONARY: A GUIDE TO KNOWLEDGE AS POWER 24 (Wolfgang Sachs ed., 2d ed. 2010).

65. Brundtland Commission, *supra* note 63, ch. II ¶ 10. .

66. See *id.* ch. II, ¶ 80; ch. III, ¶ 72-74.

67. RIST, *supra* note 51, at 186 (emphasis in original).

68. Natarajan & Khoday, *supra* note 13, at 589.

69. See Natarajan & Khoday, *supra* note 13, 589-90.

environmental agreements,⁷⁰ thereby treating the symptoms of the disease rather than addressing its underlying causes. Instead of confronting head-on an economic model based on the unrestrained extraction, trade, and consumption of natural resources, international environmental law has left intact the contemporary global economic (dis)order that enriches the affluent, exacerbates the plight of the poor, and accelerates planetary destruction. International environmental law is a field in crisis because the problems it currently confronts are deeply embedded in the existing economic order and cannot be adequately addressed by tinkering on the margins.

IV. THE WAY FORWARD

Environmental justice provides a compelling moral framework for the reconceptualization of international environmental law. The primary cause of global environmental degradation is the over-consumption of the planet's finite resources by global elites located primarily in the global North. However, the South and the planet's most vulnerable communities bear a disproportionate share of the pollution and resource depletion caused by this unsustainable economic activity.⁷¹ In response to this inequity, transnational environmental justice movements have emerged in both the North and the South, including grassroots social movements for climate justice, food justice, energy justice, and water justice.⁷² Emphasizing intra-generational justice, many of these movements have framed their demands for environmental justice in the language of human rights.⁷³ Human rights tribunals have concluded that failure to protect the environment can violate a

70. See generally Cinnamon Carlarne, *Delinking International Environmental Law & Climate Change*, 4 MICH. J. ENVTL. & ADMIN. L. 1, 15-16 (2014).

71. Gonzalez, *Environmental Justice*, *supra* note 12, at 77, 82.

72. See generally Joan Martinez-Alier et al., *Between Activism and Science: Grassroots Concepts for Sustainability Coined By Environmental Justice Organizations*, 21 J. POL. ECOLOGY 19 (2014) (describing the activities and demands of grassroots environmental justice organizations).

73. See Julian Agyeman et al., *Joined-up Thinking: Bringing Together Sustainability, Environmental Justice and Equity*, in **JUST SUSTAINABILITIES: DEVELOPMENT IN AN UNEQUAL WORLD** 1, 10 -11 (Julian Agyeman et al. eds., 2003).

variety of human rights, including the rights to life, health, property, privacy, the collective rights of indigenous peoples to their ancestral lands and resources, and the right to a healthy environment.⁷⁴

A robust conception of environmental justice also includes inter-generational justice, or the rights of future generations,⁷⁵ and the rights of nature.⁷⁶ For example, the principles of environmental justice articulated by the delegates to the 1991 First National People of Color Environmental Leadership Summit held in Washington, DC, recognize both inter-generational justice and the rights of nature.⁷⁷ Principle 1 “affirms the sacredness of Mother Earth, ecological unity and the interdependence of all species, and the right to be free from ecological destruction.”⁷⁸ Principle 3 “mandates the right to ethical, balanced and responsible uses of land and renewable resources in the interest of a sustainable planet for humans and other living things.”⁷⁹ Principle 17 emphasizes the ethical obligations of present generations to nature and to future generations by requiring:

that we, as individuals, make personal and consumer choices to consume as little of Mother Earth’s resources and to produce as little waste as possible; and make the conscious decision to challenge and reprioritize our lifestyles to ensure the health of the natural world for present and future generations.⁸⁰

74. *See generally* DONALD K. ANTON & DINAH L. SHELTON, ENVIRONMENTAL PROTECTION AND HUMAN RIGHTS (2011) (analyzing the interrelationship between human rights and environmental protection in the international legal system).

75. *See generally* EDITH BROWN WEISS, IN FAIRNESS TO FUTURE GENERATIONS: INTERNATIONAL LAW, COMMON PATRIMONY, AND INTERGENERATIONAL EQUITY (1989) (examining how the rules and principles of international law can be used to protect the rights of future generations).

76. *See generally* RODERICK FRAZIER NASH, THE RIGHTS OF NATURE: A HISTORY OF ENVIRONMENTAL ETHICS (1989) (providing an account of the evolution of environmental ethics in the United States and the growing recognition of the rights of nature).

77. *See* FIRST PEOPLE OF COLOR ENVTL. LEADERSHIP SUMMIT, PRINCIPLES OF ENVIRONMENTAL JUSTICE (1991), *available at* <http://www.ejnet.org/ej/principles.html>, *archived at* <http://perma.cc/B9JY-U28F>.

78. *Id.*

79. *Id.*

80. *Id.*

In order to implement these principles, some scholars have proposed specific criteria for equitably allocating the planet's resources between humans and other living creatures.⁸¹

Finally, environmental justice has important North-South dimensions.⁸² North-South environmental inequities manifest themselves in the form of distributive, procedural, corrective, and social injustice.⁸³ The North-South divide is grounded in *distributive injustice* because the North reaps the economic benefits of natural resource exploitation with little concern for the environmental consequences. Northern excesses have produced potentially irreversible environmental harm that will constrain the development options of present and future generations, particularly in the global South.⁸⁴ North-South relations are characterized by *procedural injustice* because the North dominates decision-making in the World Bank, the IMF, the WTO, and multilateral environmental treaty negotiations. The views of Southern countries are frequently marginalized.⁸⁵ North-South relations are marred by *corrective injustice* because Southern nations (such as the small island developing states facing the imminent loss of their territories due to climate change) have generally been unable to obtain compensation for the North's prodigious contribution to global environmental degradation or cessation of the offending conduct.⁸⁶ Finally, North-South environmental conflicts are reflective of *social injustice* "because they are inextricably intertwined with colonial and post-colonial economic policies that impoverished the global

81. See Jorge Riechmann, *Tres Principios Básicos De Justicia Ambiental* [*Three Basic Principles of Environmental Justice*], 21 REVISTA INTERNACIONAL DE FILOSOFÍA POLÍTICA [INT'L J. POL. PHIL.] 103, 107-108, 112-115 (2003).

82. See generally ANAND, *supra* note 10.

83. See Gonzalez, *Environmental Justice*, *supra* note 12, at 78-80.

84. See *id.* at 79; Christopher Flavin & Gary Gardner, *China, India, and the New World Order*, in WORLDWATCH INST., STATE OF THE WORLD 2006: SPECIAL FOCUS: CHINA AND INDIA 16-18 (2006) (explaining that the global North, along with China and India, are currently utilizing seventy-five percent of the planet's biocapacity, making it impossible for other countries to pursue economic growth without provoking global environmental catastrophe).

85. See Gonzalez, *Environmental Justice*, *supra* note 12, at 79.

86. See, e.g., Maxine Burkett, *Climate Reparations*, 10 MELB. J. INT'L L. 509, 510, 513-14 (2009).

South and facilitated the North's appropriation of its natural resources."⁸⁷

With this normative framework in mind, this section provides a very preliminary sketch of potential paths forward. Because it is impossible to re-invent international environmental law in a few short paragraphs, this section provides an illustrative rather than exhaustive list of possible alternatives to the status quo.

A. The Rights of Nature and Future Generations

Many scholars have recognized that the root of the ecological crisis is the universalization of a Northern economic model that separates humans from nature and promotes the domination of nature to satisfy human desires.⁸⁸ Ironically, the legal systems of many of the peoples of the global South who were deemed "uncivilized" and in need of "modernization" and "development" recognize the interdependence of humans and the environment and the rights of future generations.⁸⁹ Instead of attempting to "civilize" and "develop" the South in accordance with Northern preferences and priorities, it would perhaps be better to focus on transforming the practices and beliefs emanating from the North that have triggered the contemporary ecological crisis.

Where might we seek inspiration for alternatives to the dominant economic paradigm? Judge Christopher Weeramantry, in his separate opinion in the *Gabčíkovo-Nagymaros* case, argues that international law should draw upon the wisdom of the world's diverse civilizations to enrich and clarify the evolving principles of contemporary international law.⁹⁰

In the context of environmental wisdom generally, there is much to be derived from ancient civilizations and traditional legal systems in Asia, the Middle East, Africa, Europe, the Americas,

87. Gonzalez, *Environmental Justice*, *supra* note 12, at 79.

88. See BURNS H. WESTON & DAVID BOLLIER, GREEN GOVERNANCE: ECOLOGICAL SURVIVAL, HUMAN RIGHTS, AND THE LAW OF THE COMMONS 78 (2013); Geisinger, *supra* note 21, at 44-46.

89. See, e.g., Rebecca Tsosie, *Tribal Environmental Policy in an Era of Self-Determination: The Role of Ethics, Economics, and Traditional Ecological Knowledge*, 21 VT. L. REV. 225, 276-300 (1996).

90. See *Gabčíkovo-Nagymaros Project* (Hung. v. Slov.), 1997 I.C.J. 7, at 97 (Sept. 25) (separate opinion of Judge Weeramantry).

the Pacific, and Australia – in fact, the whole world. This is a rich source which modern environmental law has left largely untapped.⁹¹

Judge Weeramantry offers specific examples of civilizations that managed to survive and thrive in harmony with the environment, and discusses the philosophies, legal traditions, and technologies that made these accomplishments possible.⁹²

There were principles ingrained in these civilizations as well as embodied in their *legal systems*, for legal systems include not merely written legal systems but traditional legal systems as well, which modern researchers have shown to be no less legal systems than their written cousins, and in some respects even more sophisticated and finely tuned than the latter.⁹³

Among the principles of traditional legal systems that can be incorporated into contemporary environmental law are the trusteeship rather than ownership of natural resources, the principle of intergenerational rights, and the rights of the nature. For example, in 2008, Ecuador became the first country to adopt a national constitution recognizing the rights of nature based on the principle of *sumac kawsay*, the Kichwa idea of living in harmony with nature—known in Spanish as *el buen vivir*, or living well.⁹⁴ In 2012, New Zealand accorded legal personhood to its longest navigable river, the Whanganui, as an important step toward resolving the historic grievances of Maori peoples.⁹⁵ That same year, Bolivia adopted the *Framework Law of Mother Earth and Integral Development for Living Well*, which acknowledged

91. *Id.* at 98.

92. *See id.* at 98-106.

93. *Id.* at 109 (emphasis in original).

94. Marc Becker, *Correa, Indigenous Movements, and the Writing of a New Constitution in Ecuador*, 38 LATIN AM. PERSP. 47, 50, 59-60 (2011); Peter Burdon, *The Jurisprudence of Thomas Berry*, 15 WORLDVIEWS 151, 164 (2011); Juliet Pinto, *Legislating 'Rights for Nature' in Ecuador: The Mediated Social Construction of Human/Nature Dualisms*, in ENVIRONMENT AND CITIZENSHIP IN LATIN AMERICA: NATURES, SUBJECTS AND STRUGGLES 227 (Alex Latta & Hannah Wittman eds., 2012).

95. *See New Zealand's Whanganui River Gets Personhood Status*, ENVTL. NEWS SERV. (Sept. 13, 2012), <http://ens-newswire.com/2012/09/13/new-zealands-whanganui-river-gets-personhood-status/>, archived at <http://perma.cc/49XE-QL2N>.

the rights of nature.⁹⁶ In addition, several constitutions, including those of South Africa, Ecuador, Bolivia, Kenya, Germany, and Norway, have recognized the rights of future generations.⁹⁷

Contrary to popular misconception, the South is not indifferent to global environmental problems. Rather, Southern countries are deeply suspicious of the North's tendency to "reform" the South without assuming responsibility for the policies, practices, and ideologies emanating from the North that impoverished the South and created the present ecological crisis. Reimagining international environmental law through the histories and traditions of other civilizations might enable us to develop alternative philosophies and economic relations that will scale back the North's consumption of the planet's resources for the benefit of subordinated states and peoples, future generations, and the other living creatures with whom we share the planet.

B. Minding the Justice Gap – Taking Intra-Generational Equity Seriously

Climate change and other ecological disasters will intensify the suffering of the millions of people in the global South who lack adequate access to environmental necessities, such as clean water, food, and modern energy. However, this environmental injustice remains largely outside the purview of international environmental law. Instead, food, water, and energy are regulated through a patchwork of legal instruments and private arrangements.⁹⁸

96. See Ley Marco de La Madre Tierra y Desarrollo Integral Para Vivir Bien [Framework Law of Mother Earth and Integral Development For Living Well], Ley No. 300, Título I, Capítulo I, Artículo I (Objeto) [Law No. 300, Title I, Chapter I, Article I (Object)] Gaceta Oficial del Estado Plurinacional de Bolivia [Official Gazette of the Plurinational State of Bolivia], Edición No. 0431 [Edition No. 0431] (October 15, 2012).

97. See U.N. Secretary-General, *Intergenerational Solidarity and the Needs of Future Generations*, ¶ 37, U.N. Doc. A/68/x (Aug. 5, 2013), available at <https://sustainabledevelopment.un.org/content/documents/2006future.pdf>, archived at <https://perma.cc/V9K5-5PZ4>.

98. See Natarajan and Khoday, *supra* note 13, at 592. For an analysis of some of the food, water, and energy justice issues confronting the international community, see the chapters by Carmen G. Gonzalez, Jackie Dugard &

International environmental law can bridge the North-South divide and promote environmental justice by developing creative solutions to seemingly intractable problems that simultaneously benefit marginalized states and peoples, curb environmental degradation, and forge a new path to sustainability. For example, despite their minimal greenhouse gas emissions, the world's poorest countries will be disproportionately affected by climate change as a consequence of their vulnerable geographic locations, agriculture-based economies, and limited resources for adaptation and disaster response.⁹⁹ The 2.8 billion people who lack access to energy to meet their needs for cooking, heating, sanitation, lighting, transportation, or basic mechanical power (the energy poor) will be disparately burdened by death, disease, and dislocation as a consequence of the droughts, floods, rising sea levels, and more frequent and severe storms caused by climate change.¹⁰⁰

The climate change negotiations present the global North with an opportunity to reduce greenhouse gas emissions, repay the ecological debt, and foster environmental justice by financing the provision of clean, renewable energy to the energy poor. While the Copenhagen Accord acknowledges the importance of ensuring that low emitting countries "continue to develop on a low emission pathway[.]"¹⁰¹ it nevertheless fails to allocate funding to fulfill this objective. This omission is perplexing because the preamble to the United Nations Framework Convention on Climate Change (UNFCCC) explicitly recognizes the need to

Elisabeth Koek, and Lakshman Guruswamy in *INTERNATIONAL ENVIRONMENTAL LAW AND THE GLOBAL SOUTH* (Shawkat Alam, Sumudu Atapattu, Carmen G. Gonzalez, & Jona Razzaque, eds., forthcoming 2015). For a discussion of the human rights, environmental, and economic dimensions of access to food, see Carmen G. Gonzalez, *International Economic Law and the Right to Food*, in *RETHINKING FOOD SYSTEMS: STRUCTURAL CHALLENGES, NEW STRATEGIES AND THE LAW* 165 (Nadia C.S. Lambek et al. eds., 2014).

99. See ANAND, *supra* note 10, at 35-41.

100. See Fatih Birol, *Achieving Energy for All Will Not Cost the Earth*, in *ENERGY POVERTY: GLOBAL CHALLENGES AND LOCAL SOLUTIONS* 11, 14 (Antoine Halff et al. eds., 2015).

101. See United Nations Framework Convention on Climate Change, Dec. 7-Dec. 19, 2009, *Rep. of the Conference of the Parties on Its 15th Sess.*, ¶ 7, U.N. Doc. FCCC/CP/2009/11/Add.1 (Mar. 30, 2010), available at <http://unfccc.int/resource/docs/2009/cop15/eng/11a01.pdf>, archived at <http://perma.cc/THW8-WBKQ>.

increase energy consumption in the global South in order to eradicate poverty.¹⁰²

The lack of attention to energy poverty in climate change negotiations is unfortunate for at least four reasons. First, the reliance by the energy poor on biomass (such as wood and dried animal dung) for cooking poses significant risks to human health.¹⁰³ The smoke released by inefficient and inadequately ventilated cooking facilities produces four million premature deaths each year (primarily among women and children) due to a variety of ailments caused by exposure to indoor air pollution.¹⁰⁴

Second, the black carbon released by the combustion of biomass is the second most significant contributor to climate change after carbon dioxide. Black carbon, when it is released into the air, exacerbates climate change by absorbing solar radiation more effectively than some other greenhouse gases, such as methane and tropospheric ozone.¹⁰⁵

Third, the burning of biomass for energy contributes to deforestation. Deforestation destroys valuable carbon sinks, accelerates soil erosion, and deprives local communities of essential ecosystem services, including flood control, drought resistance, regulation of rainfall, habitat for biodiversity, and enhancement of water quality.¹⁰⁶

Finally, reducing black carbon emissions is quite inexpensive relative to other greenhouse gases, and the benefits are potentially enormous.¹⁰⁷ While carbon dioxide can reside in the

102. See United Nations Framework Convention on Climate Change, pmbl., Mar. 21, 1994, 1771 U.N.T.S. 107.

103. See generally INT'L ENERGY AGENCY (IEA), WORLD ENERGY OUTLOOK 2012, at 51, 532 (Robert Priddle ed., 2012), available at http://www.iea.org/publications/freepublications/publication/WEO2012_free.pdf.

104. See *Household Air Pollution and Health*, WORLD HEALTH ORG., <http://www.who.int/mediacentre/factsheets/fs292/en/> (last updated Mar. 2014), archived at <http://perma.cc/TPX3-G4PU>.

105. Tami C. Bond et al., *Bounding the Role of Black Carbon in the Climate System: A Scientific Assessment*, 118 J. GEOPHYSICAL RES.: ATMOSPHERES 5380, 5381 (2013); V. Ramanathan & G. Carmichael, *Global and Regional Climate Changes Due to Black Carbon*, 1 NATURE GEOSCIENCE 221, 222 (2008).

106. See generally Norman Meyers, *The World's Forests and Their Ecosystem Services*, in NATURE'S SERVICES: SOCIETAL DEPENDENCE ON NATURAL ECOSYSTEMS 215, 215-35 (Gretchen C. Daily ed., 1997).

107. See Lakshman Guruswamy, *Energy Justice and Sustainable Development*, 21 COLO. J. INT'L ENVTL. L. & POL'Y 231, 238 (2010).

atmosphere for 50 to 200 years, black carbon dissipates in as little as one week if existing emissions cease.¹⁰⁸ Thus, providing efficient sources of energy to the energy poor will mitigate climate change more effectively than merely targeting carbon dioxide emissions.¹⁰⁹

In short, reducing black carbon emissions by addressing energy poverty represents a win-win proposition in the climate change negotiations that bridges the North-South divide and enhances the well-being of the energy poor while avoiding environmental tipping points by producing immediate emissions reductions. Although providing modern electrical energy to the energy poor would be an expensive decades-long undertaking, numerous appropriate sustainable energy technologies (ASETs) are presently available, including decentralized electricity generating systems based on solar, wind, and local biodiesel, efficient cook-stoves, and solar thermal heating.¹¹⁰

Decentralized renewable energy-based systems can provide the energy poor with electrical power without binding them to existing fossil-fuel based energy systems that are expensive, polluting, and vulnerable to capture by kleptocratic national elites. ASETs thereby promote democracy, self-determination, and local control in addition to the mitigation of climate change and the acceleration of the global South's transition to sustainable energy. By producing an immediate decline in a very potent yet short-lived greenhouse gas (black carbon), ASETs also provide a short reprieve from climate catastrophe and an opportunity to develop long-term solutions to climate change and energy poverty.

The fragmentation of international law has created regulatory gaps in areas of acute environmental, economic, and social concern, such as food, water, and energy. In order to meet the challenges of the Anthropocene, international environmental law must break out of its narrow silo and foster long-term solutions to global environmental problems that advance the interests of socially and economically powerless groups while hastening the transition to more sustainable patterns of

108. *See id.* at 245.

109. *See id.* at 246.

110. *See* Lakshman Guruswamy, *Energy Poverty*, 36 ANN. REV. ENV'T & RES. 139, 145 (2011).

production and consumption. Food, energy, and water—the basic necessities of life—should be central rather than peripheral to the mission of international environmental law.

C. Challenging the Global Economic Order

International law's long-standing commitment to commerce is linked, in complex ways, to its inability to address environmental degradation. From the colonial era to the present, international law and its institutions have facilitated the free flow of goods, services, and capital across national borders without taking into account the impact on local ecosystems and livelihoods.¹¹¹

The early authors of international law regarded commerce as a “consensual act of reciprocal, mutual beneficial exchange” that would build peace and friendship among the world's scattered peoples.¹¹² This idealized view of commerce bore little relationship to the coercive practices of the colonizers, slave-traders, and settlers of the colonial era, and assumed an abundant and inexhaustible supply of natural resources.¹¹³

Despite growing awareness that human economic activity is exceeding biophysical limits, contemporary advocates of trade liberalization have adopted an equally sanguine theory of the relationship between international trade and environmental protection.¹¹⁴ Known as the Environmental Kuznets Curve (EKC) hypothesis, this theory posits an inverted-U relationship between per capita income (on the x-axis) and environmental degradation (on the y-axis), with environmental quality improving as per capita income rises.¹¹⁵ While pollution initially

111. See Bratspies, *supra* note 29, at 228.

112. See Ileana Porras, *Appropriating Nature: Commerce, Property, and the Commodification of Nature in the Law of Nations*, 3 LEIDEN J. INT'L L. 641, 646-47 (2014).

113. See *id.* at 640.

114. See Bratspies, *supra* note 29, at 231-32.

115. This theoretical relationship between environmental degradation and per capita income is referred to as EKC hypothesis because it parallels the inverted-U relationship between income inequality and per capita income put forward by economist Simon Kuznets. See Swee Chua, *Economic Growth, Liberalization, and the Environment: A Review of the Economic Evidence*, 24 ANN. REV. ENERGY ENV'T 391, 395 (1999); Simon Kuznets, *Economic Growth and Income Inequality*, 49 AM. ECON. REV. 1, 1-28 (1955). See generally Gene M. Grossman & Alan B.

increases as income grows, environmental quality supposedly improves at higher income levels.¹¹⁶

The EKC hypothesis has been challenged on empirical grounds. Empirical studies have not found a consistent inverted-U relationship between per capita income and environmental degradation,¹¹⁷ and some economists have rejected the hypothesis altogether.¹¹⁸ Indeed, greenhouse gas emissions, loss of biodiversity, depletion of fisheries, waste production, and overall ecological footprint generally increase with rising wealth.¹¹⁹ Export-driven resource extraction can also produce irreversible environmental harm (such as species extinction), and imposes enormous burdens on socially and economically marginalized communities, who bear the environmental costs of mining, logging, and petroleum extraction while reaping few of the benefits.¹²⁰

Nevertheless, this quasi-religious belief in the benefits of liberalized trade has produced an international economic order that generally ignores the environmental and social consequences of production and implicitly encourages environmental subsidies.

Krueger, *Environmental Impacts of a North American Free Trade Agreement*, in THE MEXICO-US FREE TRADE AGREEMENT 13, 35-36 (Peter M. Garber ed., 1993); Gene M. Grossman & Alan B. Krueger, *Economic Growth and the Environment*, 110 Q.J. ECON. 353, 354, 366, 368 (1995) [hereinafter *Economic Growth*].

116. See Chua, *supra* note 115, at 395; *Economic Growth*, *supra* note 115, at 366-69.

117. Chua, *supra* note 115, at 395-96.

118. See generally David I. Stern, *The Rise and Fall of the Environmental Kuznets Curve*, 32 WORLD DEV. 1419 (2004) (discussing alternative models to ascertain the true relationship between development and the environment that would supplant the EKC hypothesis).

119. See generally Kenneth Arrow et al., *Economic Growth, Carrying Capacity, and the Environment*, 268 SCI. 520 (1995) (discussing how economic growth influences environmental quality, ecosystem resiliency, the diversity of ecosystems, and the carrying capacity of the environment, while casting doubt on the inverted U-shaped curve analysis); Edward Barbier, *Introduction to the Environmental Kuznets Curve Special Issue*, 2 ENV'T & DEV. ECON. 369, 377-78 (1997) (discussing the accuracy of EKC for various indicators of environmental degradation and introducing the positions of numerous papers compiled in the special issue disputing and supporting certain aspects of EKC, but seeming to conclude that the while more closely related to short-term and localized environmental harm, long-term global ecological damage, such as "carbon dioxide, municipal waste, energy consumption and traffic volumes" increase with income or have high inversion points).

120. See Bratspies, *supra* note 29, at 238-40.

Highly competitive global markets determine what level of environmental degradation and social dislocation Southern exporters will have to bear regardless of local preferences.¹²¹ Bilateral investment treaties shield foreign investors from efforts by Southern countries to impose social and environmental standards.¹²² Sophisticated corporate investors evade the social, financial, and environmental risks of their activities by operating through multiple subsidiaries and a complex web of contracts.¹²³ The separation between consumption and production obscures the environmental and social impacts of the production process and encourages consumers to purchase the lowest cost goods regardless of their impact on exhaustible natural resources.¹²⁴ The global economic order transfers wealth from the South to the North by encouraging the sale of commodities at prices that do not reflect the social and environmental costs of production.¹²⁵

Regrettably, Northern efforts to address the negative environmental impacts of liberalized trade have exacerbated the North-South divide. The United States' decision to restrict the importation of products that did not meet its environmental requirements resulted in a series of high profile trade disputes in the 1990s, including the *U.S.-Gasoline*, *Tuna/Dolphin*, and *Shrimp/Turtle* cases.¹²⁶ In all three cases, Southern countries challenged the U.S. restrictions as GATT/WTO violations, and argued that they constituted a "neocolonial stick, a protectionist barrier [designed] to keep their economies down."¹²⁷ While the GATT/WTO resolved all three cases in favor of the Southern complainants, the WTO Appellate Body subsequently shifted its

121. *See id.* at 244-45.

122. *See* Miles, *supra* note 19, at 37-44.

123. *See generally* Shalanda Baker, *Unmasking Project Finance: Risk Mitigation, Risk Inducement, and an Invitation to Development Disaster?*, 6 TEXAS J. OIL GAS & ENERGY L. 273, 275-77 (2011) (discussing corporate project finance and its impact on human rights and the environment).

124. *See* Gonzalez, *Beyond Eco-Imperialism*, *supra* note 11, at 1003-04.

125. *See* MARTINEZ-ALIER, *supra* note 28, at 214.

126. *See* Mark Wu & James Salzman, *The Next Generation of Trade and Environment Conflicts: The Rise of Green Industrial Policy*, 108 NW. U. L. REV. 401, 408-11 (2014).

127. *Id.* at 409.

approach and recognized the legitimacy of unilateral trade restrictions to protect the environment.¹²⁸

The North's use of trade-restrictive environmental measures inflamed North-South tensions because these restrictions enabled Northern countries to dictate how the South would use its natural resources without providing technical or financial assistance to resource-poor Southern producers and without taking responsibility for the far greater environmental harm wrought by the North's consumption-driven lifestyle.¹²⁹ Instead of addressing the systemic nature of trade-induced environmental degradation and seeking to scale back its over-consumption of the planet's resources, the North imposed the cost of compliance with a series of ad hoc environmental requirements on the South. In so doing, the North perpetuated the narrative that casts Northern countries as "leaders in advancing the global environmental protection, at times resorting to tariffs and trade restrictions on imports to encourage developing countries seen as unwilling to do their share."¹³⁰ This narrative is hypocritical given the North's historic and ongoing over-exploitation of the South's resources. It also reproduces the "civilizing mission"—this time in environmental garb—and undermines North-South environmental cooperation.

While an analysis of specific proposals to reform international economic law is beyond the scope of this paper,¹³¹ the reorientation of the world economy toward more just and sustainable practices will require an unprecedented level of North-South collaboration. De-mythologizing the narratives about the unequivocal benefits of commerce and about the North's "civilizing mission" is an essential first step to bridge the North-South divide. International environmental law does not exist in a vacuum. In order to develop effective solutions to the

128. See *id.* at 411, 412-13 (describing the evolution of the GATT/WTO jurisprudence on trade-restrictive environmental measures).

129. See Gonzalez, *Beyond Eco-Imperialism*, *supra* note 11, at 1004-09.

130. Wu & Salzman, *supra* note 126, at 413.

131. For discussion of specific reforms to the global economic order, see Carmen G. Gonzalez, *An Environmental Justice Critique of Comparative Advantage: Indigenous Peoples, Trade Policy, and the Mexican Neoliberal Economic Reforms*, 32 U. PA. J. INT'L L. 723 (2011); Howard Mann, *Reconceptualizing International Investment Law: Its Role in Sustainable Development*, 17 LEWIS & CLARK L. REV. 521 (2013).

environmental crises of the Anthropocene, it is essential to harmonize the disparate stands of international law. International economic law systematically accelerates environmental degradation, subordinates the global South, and consigns environmental issues to the peripheries of legal discourse and policy-making. Without a fundamental restructuring of international economic law, a just and sustainable planet is impossible.

V. CONCLUSION

A systematic examination of international environmental law from a North-South perspective can expose the historic and contemporary inequities that have compromised the effectiveness of international environmental law and hindered our ability to address the pressing environmental problems confronting the global community. This article has provided an overview of the origins of the North-South divide in colonial and post-colonial economic law and policy and the failure of sustainable development to remedy its social, economic and environmental consequences. The objective is to provoke further discussion and analysis about new approaches to international environmental law that will promote environmental justice in an era of growing economic inequality and looming ecological collapse.