SUSTAINABLE DEVELOPMENT GOALS AND ENVIRONMENTAL JUSTICE: REALIZATION THROUGH DISAGGREGATION?

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INTRODUCTION

The global adoption of the United Nations' Sustainable Development Goals (SDGs, or Global Goals), the heir to the earlier

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Millennium Development Goals (MDGs; 2000-2015), was heralded as a major accomplishment of the international community. Analysts characterized the SDGs as "novel,"[1] "transformative,"[2] and "unprecedented."[3] However, the praise garnered by the Global Goals was far from universal. Some criticized the SDGs as being "worse than useless,"[4] suffering from "schizophrenia,"[5] and better understood as standing for "Senseless, Dreamy, Garbled."[6]

One potential explanation for the divergent perspectives on the SDGs resides in the unsettled nature of the term "sustainable development." Despite having existed in popular discourse at the global level since the 1980 World Conservation Strategy,[7] sustainable development remains a fundamentally contested concept.[8] In fact, some have gone as far as to say that "there is no common philosophy" underlying sustainable development, only varying interpretations filtered through different worldviews.[9] While these interpretations might generally be divided into institutional, ideological, and academic camps, the myriad definitions of sustainable development share an

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1 Frank Biermann, Norichika Kanie & Rakhyun E Kim, *Global Governance by Goal-setting: The Novel Approach of the UN Sustainable Development Goals*, 26–27 ENVTL. SUSTAINABILITY 26–31 (2017).

2 Casey Stevens & Norichika Kanie, *The Transformative Potential of the Sustainable Development Goals (SDGs)*, 16 INT'L ENVTL. AGREEMENTS POL. L. ECON. 393, 394 (2016).

3 Joshua C. Gellers, *Crowdsourcing Sustainable Development Goals from Global Civil Society, in* THE WSPC REFERENCE ON NATURAL RESOURCES AND ENVIRONMENTAL POLICY IN THE ERA OF GLOBAL CHANGE VOLUME 2: THE SOCIAL ECOLOGY OF THE ANTHROPOCENE: CONTINUITY AND CHANGE IN GLOBAL ENVIRONMENTAL POLITICS 415, 432 (Richard Matthew et al. eds., 2016).

4 *The 169 Commandments*, THE ECONOMIST (Mar. 26, 2015), https://www.economist.com/leaders/2015/03/26/the-169-commandments.

5 Glen T. Martin, *The UN's Sustainable Development Goals: Global Schizophrenia Global Research* (Oct. 6, 2015), https://www.globalresearch.ca/the-uns-sustainable-development-goals-global-schizophrenia/5480114 (last visited Mar. 2, 2018).

6 William Easterly, *The SDGs Should Stand for Senseless, Dreamy, Garbled*, FOREIGN POL'Y (Sept. 28, 2015, 7:22 PM), https://foreignpolicy.com/2015/09/28/the-sdgs-are-utopian-and-worthless-mdgs-development-rise-of-the-rest/ (last visited Mar. 2, 2018).

7 IUCN, UNEP & WWF, WORLD CONSERVATION STRATEGY: LIVING RESOURCE CONSERVATION FOR SUSTAINABLE DEVELOPMENT (1980).

8 Michael Jacobs, *Sustainable development as a contested concept, in* FAIRNESS AND FUTURITY: ESSAYS ON ENVIRONMENTAL SUSTAINABILITY AND SOCIAL JUSTICE 21 (Andrew Dobson ed., 1999); Bill Hopwood, Mary Mellor & Geoff O'Brien, *Sustainable Development: Mapping Different Approaches*, 13 SUSTAINABLE DEV. 38, 38 (2005).

9 Bob Giddings, Bill Hopwood & Geoff O'Brien, *Environment, Economy and Society: Fitting them Together into Sustainable Development*, 10 SUSTAIN. DEV. 187, 188 (2002).

acknowledgement that humanity faces an environmental crisis that requires a paradigm shift in the way we live.[10]

Sustainable development represents the practical means of reconciling conflicts among three sectors—the economy, environment, and society.[11] Interestingly, although social equity and environmental protection arguably fit well into the notion of sustainable development, explicit mention of the term resting at the intersection of these objectives—environmental justice (EJ)—has not been observed in any major international document on the subject.[12] In light of this curious omission, what, if any, role does EJ play in the world's latest program designed to achieve sustainable development—the SDGs? Further, to what extent, if any, are countries making strides towards realizing EJ through the pursuit of progress on the SDGs? This article offers a definitive take on the former question, and a tentative assessment on the latter.

Analysis proceeds as follows: Part I develops a comprehensive, contemporary definition of environmental justice; Part II demonstrates how EJ relates to the SDGs; Part III discusses the data obtained and methods used to analyze the presence of EJ across Voluntary National Reviews (VNRs) submitted by countries on a non-mandatory basis to disclose progress made on the SDGs; Part IV conveys the results of the empirical analysis of the VNRs; and Part V offers conclusions and recommendations for strengthening the likelihood of attaining EJ through the SDGs.

I. DEFINING ENVIRONMENTAL JUSTICE

Much like sustainable development, the term "environmental justice" suffers from a plurality of definitions and interpretations that

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[10] Desta Mebratu, *Sustainability and Sustainable Development: Historical and Conceptual Review*, 18 ENVIRON. IMPACT ASSESS. REV. 493, 504 (1998).

[11] Giddings, Hopwood & O'Brien, *supra* note 9, at 188–89.

[12] Indeed, a textual search for the phrase "environmental justice" returned zero results among several of the most foundational documents associated with sustainable development and the SDGs. *See, e.g.*, Rep. of the World Comm'n on Env't & Dev., *Our Common Future*, U.N. Doc. A/42/427 (Aug. 4, 1987); U.N. Conference on Environment and Development, U.N. Doc. A/CONF.151/26 (Aug. 12, 1992); U.N. Conference on Environment and Development, *Agenda 21* (June 1992); U.N. Conference on Environment and Development, *The Future We Want: Outcome document of the United Nations Conference on Sustainable Development* (June 2012); *Open Working Group proposal for Sustainable Development Goals* (2014); G.A. Res. 70/1, Transforming Our World: The 2030 Agenda for Sustainable Development (Sept. 25, 2015).

vary along academic and activist lines.[13] EJ has its origins in "environmental racism" (ER),[14] the concept that communities of color in the United States have been (1) deliberately targeted in the placement of toxic waste facilities; (2) discriminated against in both environmental policymaking and regulatory enforcement; and (3) excluded from assuming leadership roles in the environmental movement.[15] Dr. Benjamin Chavis is credited with having developed this concept in 1982 following protests over the siting of a hazardous waste landfill in Warren County, North Carolina.[16] The claim that minority groups endure uneven environmental burdens gained empirical support in 1987, when the United Church of Christ, Commission for Racial Justice, published its landmark report, *Toxic Wastes and Race in the United States*.[17] Today, studies demonstrating the disproportionate impact that harmful environmental conditions have on marginalized communities are legion,[18] and new scientific work in this area continues to echo the findings of past efforts.[19]

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[13] Ryan Holifield, *Defining Environmental Justice and Environmental Racism*, 22 URBAN GEOGR. 78–90 (2001).

[14] For an extended discussion of environmental racism, see Dorceta E. Taylor, *The Rise of the Environmental Justice Paradigm: Injustice Framing and the Social Construction of Environmental Discourses*, 43 AM. BEHAV. SCIENTIST 508, 534–36 (2000).

[15] Benjamin F. Chavis, *Preface*, *in* UNEQUAL PROTECTION: ENVIRONMENTAL JUSTICE AND COMMUNITIES OF COLOR xi–xii (Robert Doyle Bullard ed., 1994).

[16] Stephen Sandweiss, *The Social Construction of Environmental Justice*, *in* ENVIRONMENTAL INJUSTICES, POLITICAL STRUGGLES: RACE, CLASS, AND THE ENVIRONMENT 31, 36 (David E. Camacho ed., 1998).

[17] UNITED CHURCH OF CHRIST, TOXIC WASTES AND RACE IN THE UNITED STATES ix (1987).

[18] For notable examples, see Michael Jerrett et al., *A GIS–Environmental Justice Analysis of Particulate Air Pollution in Hamilton, Canada*, 33 ENV'T & PLAN. A 955 (2001); Rachel Morello-Frosch, Manuel Pastor & James Sadd, *Environmental Justice and Southern California's "Riskscape": The Distribution of Air Toxics Exposures and Health Risks among Diverse Communities*, 36 URBAN AFF. REV. 551 (2001); Gordon Mitchell & Danny Dorling, *An Environmental Justice Analysis of British Air Quality*, 35 ENV'T & PLAN. A 909 (2003); Jamie Pearce, Simon Kingham & Peyman Zawar-Reza, *Every Breath You Take? Environmental Justice and Air Pollution in Christchurch, New Zealand*, 38 ENV'T & PLAN. A 919 (2006); Juliana Maantay, *Asthma and Air Pollution in the Bronx: Methodological and Data Considerations in Using GIS for Environmental Justice and Health Research*, 13 HEALTH & PLACE 32 (2007); Lara P. Clark, Dylan B. Millet & Julian D. Marshall, *National Patterns in Environmental Injustice and Inequality: Outdoor NO2 Air Pollution in the United States*, 9 PLOS ONE 1 (2014); Paul Mohai & Robin Saha, *Which Came First, People or Pollution? A Review of Theory and Evidence from Longitudinal Environmental Justice Studies*, 10 ENVTL. RES. LETTERS 1 (2015); Mary B. Collins, Ian Munoz & Joseph JaJa, *Linking 'Toxic Outliers' to Environmental Justice Communities*, 11 ENVTL. RES. LETTERS 1 (2016).

[19] Ihab Mikati et al., *Disparities in Distribution of Particulate Matter Emission Sources by Race and Poverty Status*, 108 AM. J. PUB. HEALTH 480, 480 (2018).

By the late 1980s, ER gave way to "environmental equity," a term that folded gender and social class into discussions regarding environmental inequality.[20] At the start of the 1990s, activists replaced "equity" with "justice" because the latter was "more inclusive," incorporating both equality and equity.[21] Along with the terminological change came a dual emphasis on pursuing distributive justice and corrective justice in the context of environmental matters. In 1991, an expansive set of 17 Principles of Environmental Justice was adopted at the First National People of Color Environmental Leadership Summit in Washington, D.C.[22] However, once the movement defined itself in terms of EJ, academic research on the subject embarked on a path narrower in scope than that suggested by its intellectual antecedents. Although the concept of ER was clearly multifaceted from its inception, early empirical work on EJ focused on a subset of concerns articulated by movement activists—the geographic distribution of environmental disamenities like pollution or landfills[23] and its resulting impacts on the poor and people of color.[24] This limited construal of EJ signified a conceptual divorce from the term's more complex grassroots underpinnings.

As a result of the schism between how EJ was understood by activists and academics, many analysts produced research that treated EJ in monolithic terms. While some acknowledged the EJ movement's broader interest in questions regarding distributional equity,[25] a considerable number of theorists[26] and empirical scholars[27] alike reduced

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[20] Taylor, *supra* note 14, at 536–37.

[21] *Id.* at 537.

[22] Principles of Environmental Justice (1991), https://www.ejnet.org/ej/principles.pdf (last visited Mar. 7, 2018).

[23] Holifield, *supra* note 13, at 79.

[24] Julie Sze & Jonathan K. London, *Environmental Justice at the Crossroads*, 2 SOC. COMPASS 1331, 1337 (2008).

[25] Vicki Been & Francis Gupta, *Coming to the Nuisance or Going to the Barrios: A Longitudinal Analysis of Environmental Justice Claims*, 24 ECOLOGY L. Q. 1, 4 (1997).

[26] Andrew Dobson, *Social Justice and Environmental Sustainability: Ne'er the Twain Shall Meet?*, *in* JUST SUSTAINABILITIES: DEV. IN AN UNEQUAL WORLD X, Y (Julian Agyeman et al. eds., 2003); P. Alex Latta, *Locating Democratic Politics in Ecological Citizenship*, 16 ENVTL. POL. 377, 377 (2007); Kerri Woods, *What Does the Language of Human Rights Bring to Campaigns for Environmental Justice?*, 15 ENVTL. POL. 572, 572 (2006).

[27] Evan J. Ringquist, *Equity and the Distribution of Environmental Risk: The Case of TRI Facilities*, 78 SOC. SCI. Q. 811, 811 (1997); Jerrett et al., *supra* note 18; William Bowen, *An Analytical Review of Environmental Justice Research: What Do We Really Know?*, 29 ENVTL. MGMT. 3, 3 (2002); Rachel Morello-Frosch et al., *Environmental Justice and Regional*

EJ to the distribution of environmental hazards among vulnerable groups in society.[28] A positive outcome of this uni-dimensional orientation was that the connection between race and exposure to environmental risk became firmly established, although the magnitude of that relationship and the influence of socioeconomic factors remain inconclusive.[29] However, this limited interpretation of EJ obscured important concerns originally raised in the concept of ER.

It was at this juncture that EJ underwent a horizontal expansion, which extended the idea to include a broader range of issues.[30] Notably, scholars widened the distributional aspect of EJ to encompass both environmental bads *and* goods. This move made sense philosophically, as environmental goods are "potential benefits, often accompanied by restrictions, that need to go into the distributive calculus" within a theory of social justice.[31] Environmental goods include "desirable land uses, or amenities" like green spaces and "less-polluting, higher-paying industries such as white-collar service companies, high-end department stores, and arts-related nonprofits."[32] Despite the appearance of a conceptual evolution, this interpretation was not novel; the EJ movement had concerned itself with such amenities since its inception.[33]

The limited focus on the distribution of environmental bads and goods failed to capture the range of preconditions that produced the unfair outcomes decried by the EJ movement and identified in the concept of ER. Slowly catching up to its grassroots origins, EJ scholarship again expanded its scope, this time to include participation and recognition. Participation, which had "always been part of

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Inequality in Southern California: Implications for Future Research., 110 ENVTL. HEALTH PERSP. 149, 149 (2002).

[28] Confounding this terminological shift even more, some argued that the maldistribution of environmental bads should be referred to as environmental *in*justice, distinguishable from environmental justice. *See* Robert J. Brulle & David N. Pellow, *Environmental Justice: Human Health and Environmental Inequalities*, 27 ANN. REV. PUB. HEALTH 103, 104 (2006).

[29] Evan J. Ringquist, *Assessing Evidence of Environmental Inequities: A Meta-analysis*, 24 J. POL'Y ANALYSIS & MGMT. 223, 223 (2005); Paul Mohai & Robin Saha, *Reassessing Racial and Socioeconomic Disparities in Environmental Justice Research*, 43 DEMOGRAPHY 383, 383 (2006).

[30] David Schlosberg, *Theorising Environmental Justice: The Expanding Sphere of a Discourse*, 22 ENVTL. POL. 37, 41 (2013).

[31] Miller, *supra* note 8, at 155.

[32] Adam Eckerd, Yushim Kim & Heather E. Campbell, *Community Privilege and Environmental Justice: An Agent-Based Analysis*, 34 REV. POL'Y RES. 144, 145 (2017).

[33] David Schlosberg & Lisette B. Collins, *From Environmental to Climate Justice: Climate Change and the Discourse of Environmental Justice*, 5 WILEY CLIMATE CHANGE 359, 359–60 (2014).

environmental justice discourse,"[34] tacked onto the existing pillar of distribution, making EJ "bivalent."[35] This conceptual enlargement was premised on the idea that the elimination of environmental bads requires that affected groups have the ability to actively engage in environmental decision-making processes that determine how environmental bads and goods are distributed.[36] Crucially, the fairness with which decision-making processes are conducted and the extent of participation permitted in such processes contribute to the overall sense of procedural justice obtained.[37]

Following the inclusion of participation, recognition became the third pillar comprising EJ. Recognition, another determinant of distributive equity, is perhaps best articulated in terms of how its violation affects the fortunes of vulnerable people in society. "[M]isrecognition" involves "cultural and institutional processes of disrespect which devalue some people in comparison to others, meaning that there are unequal patterns of recognition across social groups (defined by gender, race, religion, ethnicity, and so on)."[38] Manifested as deliberate oppression, denial of group difference, discrimination, or disrespect, the lack of recognition afforded certain groups results in a status injury that deprives them of agency in environmental matters that may affect them. Simply put, "[i]f you are not recognised, you do not participate."[39] Thus, recognition is inextricably linked with, and temporally prior to, participation. Together they determine the fairness with which environmental bads and goods are distributed.

Supported by the three main pillars of distribution, participation, and recognition, EJ expanded once more with the introduction of "capabilities." The capabilities approach to EJ owes an intellectual debt to Amartya Sen and Martha Nussbaum,[40] who sought to propose an alternative to Rawls' fairness-oriented theory of justice. This newer approach conceived of justice as the state in which people are able to

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[34] Schlosberg, *supra* note 30, at 40.

[35] David Schlosberg, *Reconceiving Environmental Justice: Global Movements and Political Theories*, 13 ENVTL. POL. 517, 521 (2004).

[36] Julian Agyeman, Robert D. Bullard & Bob Evans, *Exploring the Nexus: Bringing Together Sustainability, Environmental Justice and Equity*, 6 SPACE & POLITY 77, 82 (2002).

[37] Robert R. Kuehn, *A Taxonomy of Environmental Justice*, 30 ENVTL. L. REP. 10681, 10688 (2000).

[38] GORDON WALKER, ENVIRONMENTAL JUSTICE: CONCEPTS, EVIDENCE AND POLITICS 50 (2012).

[39] Schlosberg, *supra* note 35, at 519.

[40] THE QUALITY OF LIFE (Martha Nussbaum & Amartya Sen eds., 1993).

"live lives that they consider worthwhile."[41] A capabilities approach injects into EJ a pluralistic understanding of justice,[42] as the desired ends of human behavior, such as well-being, are rendered person- and context-specific. According to Schlosberg, capabilities refer to "a person's opportunities to do and to be what they choose in the context of a given society; the focus is on individual agency, functioning, and well-being."[43] Functioning in this context means "what a person is able to achieve."[44] Capabilities have a reflexive relationship with distribution, participation, and recognition. Any one aspect can prohibit or promote achievement of the other.

Nussbaum has itemized a comprehensive list of capabilities representing what humans need to live a dignified life. The minimum criteria necessary to allow people to pursue a meaningful existence include being able to live a full life; enjoy good health, nourishment, and shelter; move freely; use one's senses for imagination, thought, and reason; cultivate emotional attachments; critically reflect on one's life; affiliate with others; express concern for animals, plants, and nature; laugh, play, and engage in recreation; and exert control over one's environment through political participation and ownership of property.[45] Many of these criteria relate to or are impacted by the quality of the environment in which people live. More directly, some scholars have argued that capabilities depend on the enabling conditions provided by the natural environment, thus elevating the environment to the level of a "meta-capability."[46]

Along with its array of three overlapping pillars—distribution, participation, and recognition—and capabilities, EJ scholarship has broadened its substantive focus to include issues regarding climate, energy, and food, all of which stem from concerns raised long ago by the EJ movement.[47] Climate justice (CJ) emerged from the vertical expansion

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[41] Gareth A. S. Edwards, Louise Reid & Colin Hunter, *Environmental Justice, Capabilities, and the Theorization of Well-Being*, 40 PROGRESS HUM. GEOGRAPHY 754, 755 (2016).

[42] Gordon Walker, *Environmental Justice and Normative Thinking*, 41 ANTIPODE 203, 205 (2009).

[43] DAVID SCHLOSBERG, DEFINING ENVIRONMENTAL JUSTICE: THEORIES, MOVEMENTS, AND NATURE 30 (2007).

[44] Jérôme Ballet, Jean-Marcel Koffi & Jérôme Pelenc, *Environment, Justice and the Capability Approach*, 85 ECOLOGICAL ECON. 28, 29 (2013).

[45] MARTHA C. NUSSBAUM, WOMEN AND HUMAN DEVELOPMENT: THE CAPABILITIES APPROACH 78–80 (2000).

[46] Breena Holland, *Justice and the Environment in Nussbaum's "Capabilities Approach": Why Sustainable Ecological Capacity Is a Meta-Capability*, 61 POL. RES. Q. 319, 320 (2008).

[47] Schlosberg & Collins, *supra* note 33, at 361–62.

of EJ, which highlighted the global extent of environmental injustices.[48] The CJ movement leapt onto the international scene in 2000, when the first Climate Justice Summit was held concurrently with the UN Framework Convention on Climate Change COP6 meeting at The Hague. The ideas articulated at this initial meeting found concrete expression in the 2002 Bali Principles of Climate Justice, which explicitly drew inspiration from the 1991 Principles of Environmental Justice.[49] Central tenets of CJ include compensation, democratic accountability, distribution, education, indigenous rights, interdependence of all species, intergenerational equity, participation, sustainability, and recognition.[50] CJ advocates argue that marginalized people across the world have suffered the consequences of climate change while waiting for the international community to act, and they demand that responsible parties be held accountable.[51]

Framing climate change in terms of justice has had tangible impacts with respect to international negotiations on environmental issues. For instance, utilizing EJ discourse, CJ proponents successfully shaped the conversation at the 2015 Paris COP through a discussion of the inequities that persist among developed and developing states.[52] On a theoretical level, the insertion of climate change into EJ discourse has caused a conceptual realignment whereby a functioning environment is viewed as a prerequisite for any form of justice to inhere.[53]

Related to the concept of climate justice is the topic of energy justice.[54] Unlike CJ, energy justice essentially borrows its conceptual edifice from the pillars of EJ. Energy justice became a focus of EJ research first through a horizontal expansion of the concept, and later through a vertical expansion that examined global inequities and the challenges of achieving sustainable development. As Sovacool and Dworkin explain, energy justice envisions a world "that equitably shares

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[48] Schlosberg, *supra* note 30, at 37–38.

[49] Int'l Climate Justice Network, *Bali Principles of Climate Justice* (2002), https://www.ejnet.org/ej/bali.pdf.

[50] *Id.*

[51] Jethro Pettit, *Climate Justice: A New Social Movement for Atmospheric Rights*, 35 IDS BULL. 102, 102 (2004).

[52] Julian Agyeman et al., *Trends and Directions in Environmental Justice: From Inequity to Everyday Life, Community, and Just Sustainabilities*, 41 ANN. REV. ENVTL. RESOURCES 321, 329 (2016).

[53] Schlosberg, *supra* note 30, at 48.

[54] Indeed, principles 10-12 of the Bali Principles of Climate Justice directly refer to aspects of energy justice. *See Bali Principles of Climate Justice*, *supra* note 49.

both the benefits and burdens involved in the production and consumption of energy services, as well as one that is fair in how it treats people and communities in energy decision-making."[55] The global dimension of energy justice entails the distributional inequity between the North and South and how developing states are continuously marginalized through their denial of a resource critical to alleviating poverty. Guruswamy argues that tackling the inability of people in developing countries to access energy (an environmental good) requires that industrialized states assist the energy-poor through financial or technical means (i.e., Rawlsian distributive justice).[56] These global objectives that are crucial to the attainment of energy justice recall the familiar framework consisting of distributional, recognition, and procedural justice (i.e., participation).[57] Practically speaking, achieving energy justice might require access to energy services and fairness with respect to siting energy infrastructure (i.e., distribution); not characterizing the energy-poor as merely "inefficient" consumers (i.e., recognition); and providing energy users with information on household energy consumption patterns so they can make informed claims during decision-making processes (i.e., participation).[58]

Similar to energy justice, food justice (FJ) sprang first from the horizontal (topical) and later vertical (global) expansions of EJ. Food justice refers to the conditions under which communities can eat, grow, and sell affordable, culturally appropriate, and nutritious food that is locally cultivated and sensitive to the well-being of animals, land, and workers.[59] While the EJ movement did not initially consider FJ as part of its agenda, the 2002 Second National People of Color Environmental Leadership Summit brought food-related issues to the table. The discussions at this event focused mainly on the issue of food insecurity among people of color in low-income areas around the United States. However, the conversation also featured an effort to transition from

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[55] BENJAMIN K. SOVACOOL & MICHAEL H. DWORKIN, GLOBAL ENERGY JUSTICE: PROBLEMS, PRINCIPLES, AND PRACTICES 5 (2014).

[56] Lakshman Guruswamy, *The Contours of Energy Justice, in* INTERNATIONAL ENVIRONMENTAL LAW AND THE GLOBAL SOUTH 529, 548 (Shawkat Alam et al. eds., 2015).

[57] Kirsten Jenkins et al., *Energy Justice: A Conceptual Review*, 11 ENERGY RES. & SOC. SCI. 174 (2016).

[58] *Id.*

[59] Alison Hope Alkon & Julian Agyeman, *Introduction: The Food Movement as Polyculture, in* CULTIVATING FOOD JUSTICE: RACE, CLASS, AND SUSTAINABILITY 1, 5 (Alison Hope Alkon & Julian Agyeman eds., 2011).

thinking about food as a mere "nutritional commodity"[60] to seeking to achieve food sovereignty, which recognizes "the deeper social and cultural meanings indigenous and diasporic communities assign to food."[61] The broader theme of food sovereignty elevates food to the level of a human right and pits food systems against neoliberalism and the processes of globalization.[62]

EJ provides an analytical lens with which to view North-South inequities found in the global food system. Such inequities include the maldistribution of food resulting in chronically undernourished children; harm to the livelihoods of small farmers due to the overproduction of Northern agricultural products; and food price volatility caused by land acquisition driven by the demand for biofuels.[63] Reciprocally, FJ demonstrates the ways in which EJ intersects with daily life. For instance, a food justice approach sheds light on how agriculture, the built environment, and community health all tie into concerns regarding the distribution of environmental goods (i.e., fresh vegetables) and bads (i.e., brownfields).[64]

Over the course of its development, EJ has expanded its purview to include several elements that are necessary for the attainment of justice—distribution, participation, recognition, and capabilities. It has also birthed a few cognate forms of justice—climate, energy, and food—that draw from the EJ framework and unite under the banner of social justice.[65] As discussed above, academic literature on the subject initially interpreted EJ more narrowly than did the EJ movement, but EJ scholarship has since advanced considerably by embracing its complexity. Figure 1 below depicts the relationship among all the constituent parts of EJ explored in this Part.

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[60] Teresa M. Mares & Devon G. Peña, *Environmental and Food Justice:Toward Local, Slow, and Deep Food Systems*, *in* CULTIVATING FOOD JUSTICE: RACE, CLASS, AND SUSTAINABILITY 197, 203 (Alison Hope Alkon & Julian Agyeman eds., 2011).

[61] *Id.*

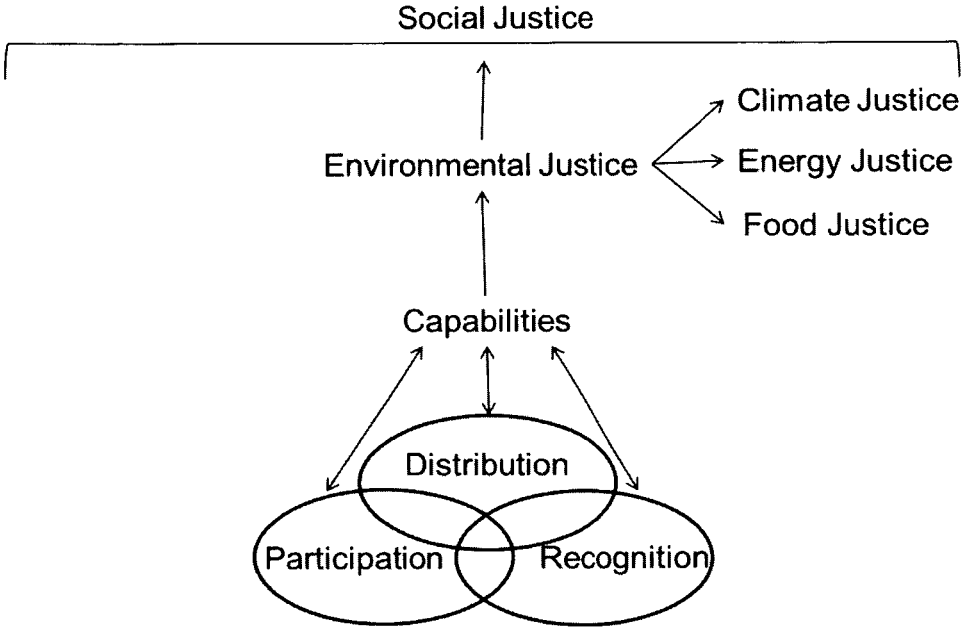
[62] *Id.* at 204.

[63] Carmen G. Gonzalez, *Food Justice: An Environmental Justice Critique of the Global Food System*, *in* INTERNATIONAL ENVIRONMENTAL LAW AND THE GLOBAL SOUTH 401, 406, 408, 418 (Shawkat Alam et al. eds., 2015).

[64] Robert Gottlieb, *Where We Love, Work, Play. . . and Eat: Expanding the Environmental Justice Agenda*, 2 ENVTL. JUST. 7, 8 (2009).

[65] Agyeman et al., *supra* note 52, at 330.

Figure 1: Relationship Between Elements of EJ and Cognate Forms of Justice



II. LINKING THE SDGS TO ENVIRONMENTAL JUSTICE

The extent to which the SDGs relate to EJ is not self-evident. The connection is opaque due to the fact that EJ is not explicitly mentioned in either the SDGs themselves or any of the foundational documents that inspired the Global Goals. As such, this Part seeks to throw the relationship into sharp relief by characterizing the internal and external aspects of the SDGs, exploring the vision of sustainable development present in the Global Goals, and demonstrating how the constituent elements and offshoots of EJ find expression in the SDGs.

One cannot adequately explain the characteristics of the SDGs without first referencing how they differ from their predecessor, the MDGs. The MDGs featured only eight goals that address some areas of development. These goals focused mainly on improving individual well-

being, included objectives that were not measurable, could not be readily adapted to national contexts, and applied only to developing countries.[66] By contrast, the SDGs feature seventeen goals that approach development more holistically, focus on issues at the individual and global levels, emphasize quantifiable objectives and enhancing data collection capacity to facilitate measurement of progress, explicitly encourage adapting goals to national contexts, and apply to both developing and developed states. Although these are not the only differences,[67] they suggest major sources of variation that may hold implications for the degree to which sustainable development can be realized in practice.

As the latest policy platform for global development, the SDGs possess certain characteristics that reveal their ontological contours and relationship to outside actors and institutions. Internally, the SDGs are anthropocentric (i.e., human-centered) in orientation.[68] They are anthropocentric in the sense that they prioritize human needs above ecological limits.[69] Scholars writing before and after the official adoption of the SDGs counseled that any approach to development intended to be sustainable would need to respect the stability of earth systems by not allowing economic activity to upset the life-supporting capacity of the biosphere.[70] Yet, the SDGs fail to observe the importance of placing constraints on human activity that might further exacerbate environmental change and degradation. Externally, the SDGs are nationally resonant and internationally untethered. As mentioned above, the Global Goals actively promote context-specific articulation of development objectives. Although this approach may encourage greater national participation in the effort to achieve the SDGs because of its

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[66] Markus Loewe, *Post 2015: How to Reconcile the Millennium Development Goals (MDGs) and the Sustainable Development Goals (SDGs)?*, 18 GER. DEV. INST. (2012).

[67] For a discussion of important differences between the MDGs and SDGs, see Sanjiv Kumar, Neeta Kumar & Saxena Vivekadhish, *Millennium Development Goals (MDGs) to Sustainable Development Goals (SDGs): Addressing Unfinished Agenda and Strengthening Sustainable Development and Partnership*, 41 INDIAN J. COMMUNITY MED. 1 (2016).

[68] The Open Working Group responsible for proposing the SDGs unequivocally states: "People are at the centre of sustainable development . . . ." *See* Rep. of the Open Working Group of the General Assembly on Sustainable Development Goals, at 7, U.N. Doc. A/68/970 (2014).

[69] Louis J. Kotzé & Duncan French, *The Anthropocentric Ontology of International Environmental Law and the Sustainable Development Goals: Towards an Ecocentric Rule of Law in the Anthropocene*, 7 GLOBAL J. COMP. L. 5, 27 (2018).

[70] David Griggs et al., *Policy: Sustainable Development Goals for People and Planet*, 495 NATURE 305 (2013); Erling Holden, Kristin Linnerud & David Banister, *The Imperatives of Sustainable Development*, 25 SUSTAINABLE DEV. 213 (2017).

flexibility, it might also lead to a divergence in the way states prioritize the goals, resulting in non-uniform developmental outcomes.[71] In addition, the SDGs suffer from a malady similar to that which befell the MDGs—they are "detached from the international legal system."[72] Thus, the SDGs are non-binding on states, a fact that might hinder their uptake and implementation. One potential solution to this pitfall and the anthropocentric nature of the SDGs involves reaffirming the 1982 World Charter for Nature[73] or pursuing a new ecocentric (i.e., ecologically-centered) binding agreement through the United Nations.[74]

Although some suggest that the SDGs are "not based on any particular interpretation of the world,"[75] others claim that their vision for sustainable development derives from *Our Common Future*,[76] the 1987 landmark report of the UN World Commission on Environment and Development that defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."[77] Importantly, this definition is accompanied by two related ideas: (1) priority should be placed on the needs of the world's poor; and (2) technology and social organization impose limits on the ability of the environment to meet the needs of people now and in the future.[78] The practical implications of this definition obtained clarification in subsequent documents leading up to the formal release of the SDGs. For instance, in *The Future We Want*,[79] the outcome document of the 2012 UN Conference on Sustainable Development in Brazil, heads of state and high-ranking government officials expressed their desire to "promote sustained and inclusive economic growth, social development and environmental protection,"[80] a nod toward balancing the economic, social, and environmental pillars of sustainable development. In 2014, the Open Working Group established to develop the SDGs put forth a proposal that largely reiterated the challenges and objectives of sustainable development detailed in the

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[71] David Le Blanc, *Towards Integration at Last? The Sustainable Development Goals as a Network of Targets*, 23 SUSTAINABLE DEV. 176, 186 (2015).

[72] Biermann, Kanie & Kim, *supra* note 1, at 26.

[73] G.A. Res. 37/7, World Charter for Nature, (Oct. 28, 1982).

[74] Kotzé & French, *supra* note 69, at 35–36.

[75] Le Blanc, *supra* note 71, at 184.

[76] Kotzé & French, *supra* note 69, at 26.

[77] WORLD COMM'N ON ENV'T & DEV., OUR COMMON FUTURE 43 (1987).

[78] *Id.*

[79] G.A. Res. 66/288, The Future We Want (July 27, 2012).

[80] *Id.* ¶ 1.

2012 outcome document, but also acknowledged "the foundation laid by the Millennium Development Goals."[81] Significantly, the MDGs represented the practical embodiment of the capabilities approach[82] (discussed in Part I). However, despite expanding on the MDGs to bolster attention to the environmental domain of sustainable development, the SDGs remained true to their predecessor's emphasis on capabilities. We return to this point later in this Part.

To date, there have been few efforts to empirically evaluate the extent to which the SDGs can be categorized according to broader themes or concepts. Gupta and Vegelin find that the Global Goals focus more on social inclusiveness (i.e., "empowering the poorest through investing in human capital and enhancing the opportunities for participation") than ecological inclusiveness (i.e., "the relation between environmental issues and the marginalized").[83] Reid et al. conclude that the SDGs give short shrift to environmental concerns to the detriment of social and economic goals that depend on the safeguarding of environmental conditions.[84] Both of these efforts suggest that despite the stated intention of balancing the economic, environmental, and social spheres of sustainable development, the SDGs fall demonstrably short.

Given the thematically unbalanced and apparently "vague"[85] content of the SDGs, to what extent is it possible to assess how EJ fits into the picture of post-2015 development policy? As mentioned earlier in this Part, the creators of the MDGs were strongly influenced by the capabilities approach. This argument was supported by Gupta and Vegelin's observation that social inclusiveness figured more prominently than ecological inclusiveness in the Global Goals, as social inclusiveness involves human capabilities and participation. But in order to understand if and how EJ relates to the SDGs, a more systematic analysis is needed.

The first step in such an analysis involves categorizing the targets according to the aspects of EJ to which they relate. To this end, we reviewed all 169 targets to determine whether they could be sorted

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[81] Rep. of the Open Working Group of the General Assembly on Sustainable Development Goals, at 9, U.N. Doc. A/68/970 (2014).

[82] Sakiko Fukuda-Parr, *Theory and Policy in International Development: Human Development and Capability Approach and the Millennium Development Goals*, 13 INT'L STUD. REV. 122, 122–23 (2011).

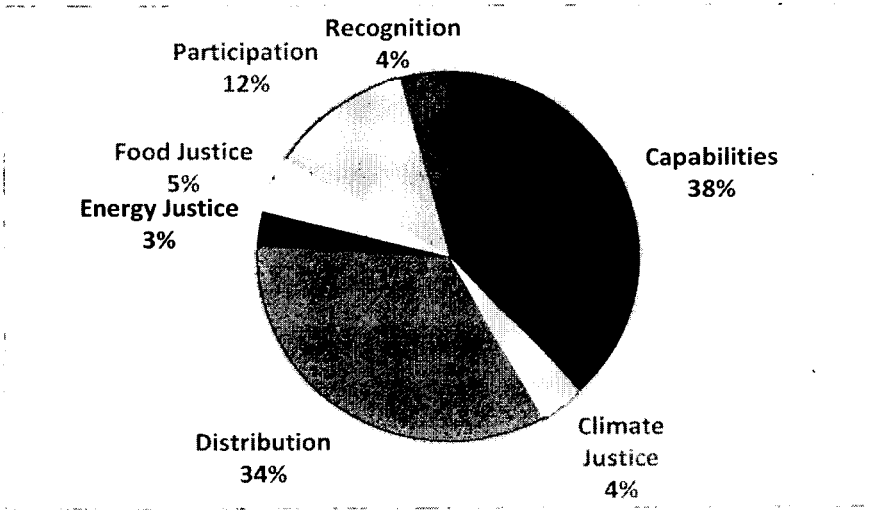
[83] Joyeeta Gupta & Courtney Vegelin, *Sustainable Development Goals and Inclusive Development*, 16 INT'L ENVTL. AGREEMENTS 433, 436, 438, 444 (2016).

[84] Andrea J. Reid et al., *Post-2015 Sustainable Development Goals Still Neglecting Their Environmental Roots in the Anthropocene*, 77 ENVTL. SCI. & POL'Y 179, 179 (2017).

[85] Holden, Linnerud & Banister, *supra* note 70, at 214.

into one or more of the aforementioned seven aspects of EJ. Any target that directly related to one or more of these aspects was coded "C" for capabilities, "CJ" for climate justice, "D" for distribution, "E" for energy justice, "F" for food justice, "P" for participation, or "R" for recognition. The results of the qualitative analysis show that just over 50% of the targets (N = 86) directly relate to one or more of the seven EJ components. Figure 2 displays a breakdown of how the four elements of EJ and three cognate forms of justice are distributed throughout the SDGs.

Figure 2: Distribution of Environmental Justice Components Among the SDGs



As the figure illustrates, a plurality (38%) of the targets reflect the capabilities approach, which adds further support to the findings of Gupta and Vegelin. Distribution was the second most common (34%) aspect of EJ identified. The remaining elements and cognate forms of justice together relate to only 28% of the targets. In short, an empirical evaluation of the extent of EJ among the SDGs demonstrates that the Global Goals are heavy on capabilities, which makes sense given the origins of the MDGs, and distribution, which is the earliest recognized prong of EJ found in academic literature.

III. DATA AND METHODS

Part II presented the distribution of constituent elements and cognate forms of justice related to EJ found within the SDGs. Collectively, the resulting percentages serve as a baseline against which national translation of the SDGs can be compared. The goal of conducting such comparisons is to understand whether and to what extent national efforts to realize the SDGs emphasize EJ in the way the concept was operationalized at the global level. Part III describes the methods used to proceed with such an empirical undertaking.

The 2030 Agenda marking the arrival of the SDGs broadly sketched out follow-up and review processes pertaining to implementation of the Global Goals at varying levels of governance.[86] Importantly, these processes would be led by countries, enacted on a voluntary basis, and designed to reflect national differences.[87] At the state level, progress made toward achieving the SDGs would be described in VNRs submitted to the UN High-level Political Forum on Sustainable Development (HLPF). In early 2016, the UN Secretary General proposed common reporting guidelines intended to inform the content and organization of VNRs.[88] These reports detail how states have translated, integrated, and implemented the SDGs in light of national circumstances.

In order to assess the extent to which countries are making strides towards realizing EJ, including its various elements and cognates, we analyzed 49 VNRs from 2016 and 2017, representing 79% of all reviews submitted over the first two years of voluntary reporting.[89] In particular, we examined each VNR for explicit mention of progress regarding all of the individual targets relevant to EJ that we identified in Part II, resulting in a data set comprising 4,214 data points. We assigned each target one of three possible codes: "NR" means that a target was not mentioned at all in the VNR; a "0" signifies that the target was mentioned, but no progress was made, negative progress was made, or there was no mention of specific steps or agencies working toward this objective; and a "1" indicates that the target was mentioned and progress

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[86] MACHARIA KAMAU, PAMELA CHASEK & DAVID O'CONNOR, TRANSFORMING MULTILATERAL DIPLOMACY: THE INSIDE STORY OF THE SUSTAINABLE DEVELOPMENT GOALS 6 (2018).

[87] G.A. Res. 70/1, *supra* note 12, ¶74.

[88] U.N. Secretary-General, *Critical Milestones towards Coherent, Efficient and Inclusive Follow-Up and Review at the Global Level*, at 25–27, U.N. Doc. A/70/684 annex (Jan. 15, 2016).

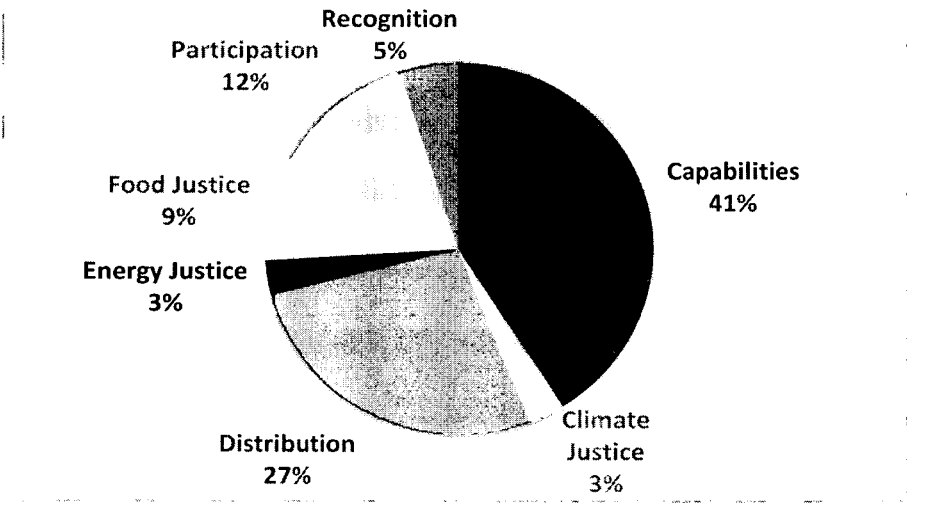
[89] This sample includes all VNRs currently available in English. All VNRs submitted to the HLPF can be downloaded at https://sustainabledevelopment.un.org/vnrs/ (last visited Nov. 5, 2018).

is being made or information is provided on how this target is advancing (i.e., what agency or group has been specifically mentioned and assigned to work on this target, what policy has been adopted to promote its achievement, etc.). We then tallied up both the total number of targets mentioned and the number of targets relevant to each of the seven aspects of EJ. Part IV reports the findings of our analysis.

IV. EMPIRICAL ANALYSIS OF VOLUNTARY NATIONAL REVIEWS

To begin, the results of the empirical analysis reveal that, on average, VNRs make direct mention of nearly 38% of the targets associated with EJ. Belgium submitted the most EJ-resonant VNR (mentioning 81% of the targets pertaining to EJ), while Egypt delivered a VNR that featured the fewest proportion of targets relating to EJ (8%). In terms of the elements and cognates of EJ, on average the VNRs privileged capabilities (41% of the EJ-related targets) and distribution (27%). Targets focusing on participation (12%) were less frequently observed, and recognition (5%) appeared in only a small minority of reports. Interestingly, of the cognate forms of justice inspired by EJ, food justice (8%) was highlighted more than twice as often as climate or energy justice (both 3%). These findings are presented in figure 3 below.

Figure 3: Distribution of Environmental Justice–Related Targets Within the VNRs



Comparing the distribution of elements and cognate forms of justice found among the SDGs with the distribution obtained through the empirical analysis of VNRs largely reflects a tendency toward similarity between the extent of EJ present in the Global Goals and the kinds of targets pursued at the national level. The difference between the percentage of EJ-related targets in the SDGs and the balance of EJ elements within the VNRs was mostly minor and usually negative (indicating that the distribution of EJ components within the VNRs was slightly higher than the percentage of targets focused on aspects of EJ in the SDGs). However, there is one notable exception. Within the SDGs, roughly 34% of the targets evince the distribution of environmental bads and goods, whereas only 27% of the EJ-related targets in the VNRs deal with distribution.

The preceding analysis offers three insights. First, components of EJ can be found within the VNRs that countries have submitted to indicate their progress towards achieving the SDGs. Significantly, none of the VNRs evaluated in this study failed to specifically mention at least some targets relevant to EJ (even Egypt's VNR discussed 12 such targets). Second, the extent to which elements and cognates of EJ appear

in VNRs varies greatly among states. This may be a result of many factors such as, *inter alia*, resources dedicated to implementing the SDGs, financial constraints, data availability, and national priorities. Third, a strong plurality of those targets linked to EJ center on capabilities. Of course, this observation could be an artifact of the sheer number of targets within the SDGs that are associated with capabilities. But it could also represent a common focus among states on advancing development by providing individuals with the enabling conditions necessary to thrive and obtain well-being. Given the ideological underpinnings of the MDGs and later SDGs, it is unsurprising that the Global Goals are heavy on capabilities. Neither is it a stunning revelation that distribution figured prominently among those VNRs analyzed. As discussed earlier, distribution has long been the most commonly cited aspect of EJ found in academic literature on the subject.

We encountered a few methodological issues during the process of analyzing VNRs and drawing meaningful conclusions from our observations. First, in this early stage of voluntary reporting, it is possible that countries chose to describe achievements in areas where substantial progress was already underway prior to the adoption of the SDGs. Plucking such low-hanging fruit may have skewed the kinds of targets identified in the reports, although selective reporting is difficult to determine without knowing more about each country's national circumstances prior to the writing of these reports. Second, states occasionally failed to adequately consider how progress towards the attainment of one SDG might also contribute to the fulfillment of another. This neglect of the integrative nature of the SDGs[90] likely resulted in underselling the gains made in certain areas while also hampering empirical analysis of the degree to which progress has been realized on targets not mentioned in the reports. Third, our analysis did not examine in extensive detail on a comparative basis the amount of progress made on EJ-related targets. Therefore, our approach may have assigned greater weight to the quantity of targets discussed than to the quality or degree of progress obtained. Finally, despite the characterization of the SDGs as universal, some of the targets simply do not apply to some countries, possibly limiting the ability of some states to address EJ-relevant goals. For instance, target 15.4 involves conserving mountain ecosystems in order to strengthen state capacity to

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[90] Mark Stafford-Smith et al., *Integration: The Key to Implementing the Sustainable Development Goals*, 12 SUSTAINABLE SCI. 911, 916 (2017).

provide certain benefits from these natural areas. Countries that do not feature mountainous topography would not be able to pursue this target related to the distribution of environmental goods. In spite of these methodological shortcomings, the findings presented here offer a tentative assessment of the extent and kind of EJ addressed through state efforts to implement the SDGs.

V. CONCLUSION

Although the SDGs do not include any explicit mentions of environmental justice, that does not mean that EJ is altogether absent from the post-2015 development agenda. On the contrary, by disaggregating the concept of EJ into its constituent elements and cognate forms of justice and deciphering the extent to which the language of the SDGs directly relates to these components, the relationship between current development policy and environmental justice becomes clearer. The empirical analysis reported here offers some initial evidence regarding the degree to which EJ is being realized through implementation of the SDGs in countries the world over. Our findings suggest that states are predominantly placing their emphasis on enhancing the capabilities of individuals and also making strides to improve how environmental bads and goods are distributed within societies. In the first two years since the inception of the SDGs, states have devoted comparatively less attention to participation, recognition, and related forms of justice.

It is important to note that the present level of emphasis that states place on certain aspects of EJ within the SDGs could change in the near future. While the UN Secretary General originally proposed affording countries significant latitude in terms of which SDGs they choose to report progress on, the revised version of the reporting guidelines encourages states to review all of the Global Goals.[91] In addition, a recent stakeholder report on VNRs submitted in 2017 found that most countries did not detail their progress on all of the SDGs and suggested that states adopt the best practice of providing a "[d]etailed assessment of all 17 SDGs with appropriate linkages to all dimensions of

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[91] U.N. Department of Economic and Social Affairs, Voluntary Common Reporting Guidelines for Voluntary National Reviews at the High-Level Political Forum for Sustainable Development (HLPF) (2017).

sustainable development."[92] It remains to be seen whether states will take these suggestions to heart given the voluntary nature of these reports. However, as more countries engage in the process of writing VNRs, best practices are identified and refined, and North-South cooperation may improve the capacity among developing states to collect data and report on progress. As such, the completion and submission of VNRs may increase the likelihood that more targets related to EJ will be engaged in the course of implementing the SDGs. Whether successful achievement of the SDGs and their accompanying targets produces EJ outcomes is a question the world will be interested in answering at the conclusion of this era in the global pursuit of sustainable development.

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[92] SHANNON KINDORNAY, PROGRESSING NATIONAL SDGS IMPLEMENTATION: AN INDEPENDENT ASSESSMENT OF THE VOLUNTARY NATIONAL REVIEW REPORTS SUBMITTED TO THE UNITED NATIONS HIGH-LEVEL POLITICAL FORUM ON SUSTAINABLE DEVELOPMENT IN 2017 iii (2018).