

# A Disability Rights Approach to Climate Governance

Sébastien Jodoin,\* Nilani Ananthamoorthy\*\* and Katherine Lofts\*\*\*

*Despite international recognition of the greater vulnerability of persons with disabilities to climate change, disability issues have received little attention from practitioners, policy makers, and scholars in this field. As countries move forward with measures to combat climate change and adapt to its impacts, it is critical to understand how these efforts can be designed and implemented in ways that can respect, protect, and fulfill the human rights of disabled persons. Drawing on the human rights model of disability enshrined in the United Nations Convention on the Rights of Persons with Disabilities, we set out a disability rights approach to climate governance that identifies the differential impacts of climate change for disabled persons and outlines the principles, obligations, and standards for designing and adopting accessible climate mitigation and adaptation policies and programs. On the whole, we argue that States should identify and pursue synergies between the realization of disability rights and the pursuit of initiatives to decarbonize their economies as well as prepare their societies against future climate impacts. In addition to fulfilling the rights of persons with disabilities and fostering a more inclusive world, disability-inclusive climate solutions can have resonant outcomes that can enable a greater share of the population to contribute to the emergence of carbon neutrality and enhance the climate resilience of society as whole.*

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DOI: <https://doi.org/10.15779/Z38W37KW48>

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\* Sébastien Jodoin is an assistant professor in the McGill Faculty of Law, where he holds the Canada Research Chair in Human Rights and the Environment. He is also a member of the Centre for Human Rights & Legal Pluralism and an associate member of the McGill School of Environment and the Max Bell School of Public Policy. This Article was presented at the 7th Sabin Colloquium on Innovative Environmental Law Scholarship, a panel of the Law & Society Association and a faculty seminar of the McGill Faculty of Law. We are grateful to the discussants and participants in these conferences as well as to Margaretha Wewerinke for providing feedback and comments on earlier drafts of this Article.

\*\* Nilani Ananthamoorthy is a BCL/JD candidate in the McGill Faculty of Law and a research associate with the Canada Research Chair in Human Rights and the Environment at McGill University.

\*\*\* Katherine Lofts is a research associate with the Canada Research Chair in Human Rights and the Environment at McGill University.

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#### INTRODUCTION

Over the last decade, multiple resolutions at the United Nations Human Rights Council (UNHRC)<sup>1</sup> and decisions adopted under the United Nations Framework Convention on Climate Change (UNFCCC)<sup>2</sup> have recognized that climate change has adverse implications for a number of human rights, including the rights to life, health, livelihood, housing, food, water, and self-determination. International bodies and experts have accordingly advocated for a rights-based approach to the development and implementation of climate policies, with a goal of enhancing their coherence, legitimacy, and sustainability.<sup>3</sup> The preamble to the Paris Agreement, which sets out an international framework for global climate governance, thus provides that States should “respect, promote, and

1. Human Rights Council Res. 7/23, U.N. Doc. A/HRC/RES/7/23 (March 28, 2008); Human Rights Council Res. 10/4, U.N. Doc. A/HRC/RES/10/4 (March 25, 2009); Human Rights Council Res. 18/22, U.N. Doc. A/HRC/RES/18/22 (Sept. 30, 2011); Human Rights Council Res. 26/27, U.N. Doc. A/HRC/RES/26/27 (July 15, 2014); Human Rights Council Res. 29/15, U.N. Doc. A/HRC/RES/29/15 (July 22, 2015); Human Rights Council Res. 16/11, U.N. Doc. A/HRC/RES/16/11 (Apr. 12, 2011); Human Rights Council Res. 19/10, U.N. Doc. A/HRC/RES/19/10 (Apr. 19, 2012); Human Rights Council Res. 25/21, U.N. Doc. A/HRC/RES/25/21 (Apr. 15, 2014); Human Rights Council Res. 28/11, U.N. Doc. A/HRC/RES/28/11 (Apr. 7, 2015); Human Rights Council Res. 32/33, U.N. Doc. A/HRC/RES/32/3 (July 18, 2016).

2. U.N. Framework Convention on Climate Change, *Report of the Conference of the Parties on its Sixteenth Session*, FCCC/CP/2010/7/Add.1, (Mar. 15, 2011) [hereinafter UNFCCC COP].

3. H.R.C. Res. 18/22, *supra* note 1; Office of the U.N. High Commissioner for Human Rights (OHCHR), *Relationship Between Climate Change and Human Rights*, U.N. Doc. A/HRC/10/61 (Jan. 15, 2009) [hereinafter *Relationship Between Climate Change and Human Rights*]; 21st Conference of the Parties to the U.N. Framework Convention on Climate Change, *Understanding Human Rights and Climate Change* (Nov. 27, 2015) [hereinafter *Understanding Human Rights and Climate Change*].

consider their respective human rights obligations” when taking action to address climate change.<sup>4</sup>

Persons with disabilities<sup>5</sup> have been singled out in these resolutions, decisions, and reports as one of the groups whose rights may be adversely affected by climate change, alongside other groups such as Indigenous peoples, children, and migrants.<sup>6</sup> In its most recent resolution on human rights and climate change, the UNHRC most notably called on States “to support the resilience and adaptive capacities of persons with disabilities both in rural and urban areas to respond to the adverse impacts of climate change.”<sup>7</sup> To that end, the UNHRC has adopted a new program focused on identifying best practices for promoting the rights of persons with disabilities in the context of climate change.<sup>8</sup>

Despite international recognition of the greater vulnerability of persons with disabilities to climate impacts, practitioners and policy makers continue to pay little attention to disability issues in that context, rendering those needs largely “invisible” in climate adaptation efforts.<sup>9</sup> The needs and perspectives of people with disabilities have been excluded from initiatives to reduce carbon emissions in affluent societies, even as those societies work on the development of mass transit, energy efficiency measures, or ecological homes.<sup>10</sup> Moreover, the growing body of legal scholarship on the intersections of human rights and climate change has failed to address the relationship between the rights of persons with disabilities and efforts to combat climate change.<sup>11</sup> Indeed, none of

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4. Paris Agreement to the U.N. Framework Convention on Climate Change, Dec. 12, 2015, T.I.A.S. No. 16-1104.

5. This Article uses the terms “persons with disabilities” and “disabled persons” interchangeably as both terms are used by scholars and activists in the disability movement.

6. See, e.g., H.R.C. Res 25/21, *supra* note 1; U.N. Framework Convention on Climate Change Conference of Parties, *Report of the Conference of the Parties on its Twenty-First Session*, FCCC/CP/2015/10 (Jan. 29, 2016).

7. Human Rights Council Res. 41/21, U.N. Doc. A/HRC/41/L.24, at 4–5 (July 9, 2019).

8. *Id.* at 5.

9. See Gregor Wolbring, *A Culture of Neglect: Climate Discourse and Disabled People*, 12 M/C J. (2009); Gregor Wolbring & Verlyn Leopatra, *Climate Change, Water, Sanitation and Energy Insecurity: Invisibility Of People With Disabilities*, 1 CAN. J. DISABIL. STUD. 66 (2012).

10. Deborah Fenney & Carolyn Snell, *Exceptions to the Green Rule? A Literature Investigation into the Overlaps Between the Academic and UK Policy Fields of Disability and the Environment*, 16 LOC. ENV'T 251, 251–64 (2011); Deborah Fenney Salkeld, *Sustainable Lifestyles for All? Disability Equality, Sustainability and the Limitations of Current UK Policy*, 31 DISABILITY & SOC'Y 447, 447–64 (2016).

11. See generally Svitlana Kravchenko, *Right to Carbon or Right to Life: Human Rights Approaches to Climate Change*, 9 VT. J. ENVTL. L. 513 (2008) (exploring the role of human rights in the enforcement of governmental climate change policies); Marilyn Averill, *Linking Climate Litigation and Human Rights*, 18 REV. EUR. COMP. & INT'L ENVTL. L. 139 (2009) (exploring the application of climate change litigation to human rights issues); Edward Cameron, *Human Rights and Climate Change: Moving from an Intrinsic to an Instrumental Approach*, 38 GA. J. INT'L & COMP. L. 673 (2010) (discussing the intersection between climate change, development, and human rights); HUMAN RIGHTS AND CLIMATE CHANGE (Stephen Humphreys ed., 2009) (a collection of articles concerning how climate change will disproportionately affect poorer countries); John H. Knox, *Climate Change and Human Rights Law*, 50 VA. J. INT'L L. 163 (2009) (discussing the intersection between human rights law and climate change); John H. Knox, *Linking Human Rights and Climate Change at the United Nations*, 33 HARV. ENVTL. L. R.

the articles, monographs, edited books, or special issues that have been published on human rights and climate change tackles how the rights of persons with disabilities might be affected by climate change.<sup>12</sup>

The lack of attention paid by legal scholars to the relationship between disability rights and climate governance is all the more conspicuous in light of mounting evidence that the lives, health, and well-being of disabled persons are likely to be significantly affected by the consequences of climate change.<sup>13</sup> As countries move forward with measures to combat climate change and adapt to its impacts, it is critical to understand how these efforts can be designed and implemented in ways that can respect, protect, and fulfill the rights of persons with disabilities.

This Article seeks to fill this gap by discussing the role and contributions of disability rights to the field of climate governance. On the whole, we argue that a disability rights approach is critical to understand the differential impacts of climate change for disabled persons and to ensure that their rights are recognized and protected in the development and implementation of climate policies. Because of its unique focus on the rights of persons with disabilities and the distinctive elements of international disability law, our analysis also enriches scholarly understanding of the role and relevance of human rights obligations,

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477 (2009) (analyzing recent reports by the UN High Commissioner for Human Rights on climate change and human rights); Stephen L. Kass, *Integrated Justice: Human Rights, Climate Change, and Poverty*, 18 *TRANSNAT'L L. & CONTEMP. PROBS.* 115 (2009) (describing the role of human rights organizations in combatting climate change); Svitlana Kravchenko, *Procedural Rights as a Crucial Tool to Combat Climate Change*, 38 *GA. J. INT'L & COMP. L.* 613 (2010) (discussing how procedural rights such as the freedom of expression and access to justice play a role in fighting climate change); Marc Limon, *Human Rights Obligations and Accountability in the Face of Climate Change*, 38 *GA. J. INT'L & COMP. L.* 543 (2010) (discussing the role of the UN Human Rights Council and related international law mechanisms in addressing climate change); Margreet Wewerinke & Curtis F.J. Doebbler, *Exploring the Legal Basis of a Human Rights Approach to Climate Change*, 10 *CHINESE J. INT'L L.* 141 (2011) (considers how States can be held responsible for climate change under international law); SUMUDU ATAPUTTU, *HUMAN RIGHTS APPROACHES TO CLIMATE CHANGE: CHALLENGES AND OPPORTUNITIES* (2016) (exploring the human rights implications of international environmental law in relation to climate change); SÉBASTIEN DUYCK ET AL., *THE ROUTLEDGE HANDBOOK OF HUMAN RIGHTS AND CLIMATE GOVERNANCE* (Sébastien Duyck et al. eds., 2018) (exploring the integration of human rights in global climate governance).

12. See *supra* note 11 and accompanying text.

13. See generally FRED SMITH ET AL., *DISABILITY AND CLIMATE RESILIENCE: A LITERATURE REVIEW* (2017) (analyzing various international law frameworks that address climate change and the rights of persons with disabilities); JOHN TWIGG ET AL., *DISABILITY INCLUSION AND DISASTER RISK REDUCTION: OVERCOMING BARRIERS TO PROGRESS* (2018) (identifying challenges to disability inclusion in disaster preparedness); MARIA KETT & ELLIE COLE, *DISABILITY AND CLIMATE RESILIENCE RESEARCH REPORT* (2018) (addressing gap in information about the effect of climate change on persons with disabilities); CHARLES EHRHART ET AL., *HUMANITARIAN IMPLICATIONS OF CLIMATE CHANGE* (2nd ed., 2009) (addressing the impact of climate change on vulnerable groups including persons with disabilities); DAVID LEWIS & KATH BALLARD, *DISABILITY AND CLIMATE CHANGE* (David Lewis & Kath Ballard eds., 2011) (addressing the gap in literature about the impact of climate change on persons with disabilities); EPA, *CLIMATE CHANGE AND THE HEALTH OF PEOPLE WITH DISABILITIES* (2016) (describing impact of climate change on persons with disabilities); NICK WATTS ET AL., *STRENGTHENING HEALTH RESILIENCE TO CLIMATE CHANGE* (Nina Behman ed., WHO 2015) (discussing the role of the health community in response to climate change).

principles, and approaches to addressing climate change. In particular, we demonstrate that the pursuit of disability-inclusive climate action can not only protect the lives and dignity of disabled persons, but also has the potential to make efforts to ensure a just transition and foster climate resilience more accessible to a greater share of the population.

We proceed as follows. In Part I, we discuss the human rights model of disability and provide an introduction to the field of international disability rights law. In Part II, we analyze whether and how the consequences of climate change may adversely affect the rights of persons with disabilities. In Part III, we analyze how legal obligations relating to the implementation of disability rights may influence different aspects of climate governance. In Part IV, we conclude by briefly discussing the contributions and limitations of a disability rights approach for protecting and empowering persons with disabilities in an increasingly dangerous climate.

#### I. ANALYTICAL FRAMEWORK: THE HUMAN RIGHTS MODEL OF DISABILITY

The field of disability studies has long been concerned with understanding the ways in which social, economic, and institutional barriers have prevented persons with disabilities from fully participating in society,<sup>14</sup> including in policy processes.<sup>15</sup> In particular, the social model of disability conceives of disability as resulting not from the impairments of individuals, but from the way societies are organized, as reflected in negative attitudes, inaccessible physical structures, discriminatory policies, and a lack of support.<sup>16</sup> Building on this literature, a number of scholars have begun to explore whether and to what extent efforts to address environmental issues and problems include persons with disabilities.<sup>17</sup>

In this Article, we specifically draw on the “human rights model of disability” to analyze the ways in which the consequences of climate change and

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14. Mike Oliver & Colin Barnes, *Disability Studies, Disabled People and the Struggle for Inclusion*, 31 BRITISH J. SOC. EDUC. 547, 549–50 (2010).

15. See ALAN ROULSTONE ET AL., *DISABILITY, SPACES AND PLACES OF POLICY EXCLUSION* (1st ed., 2014).

16. See generally MICHAEL OLIVER, *SOCIAL WORK WITH DISABLED PEOPLE* (1983) (discussing the need to change the concept of social work to matching people with the resources they need within a legal framework); MICHAEL OLIVER, *THE POLITICS OF DISABLEMENT* (1990) (discussing the social model of disability in the context of capitalism and politics); MICHAEL OLIVER, *UNDERSTANDING DISABILITY: FROM THEORY TO PRACTICE* (1996) (discussing the challenges faced by persons with disabilities in society); Tom Shakespeare & Nicholas Watson, *Defending the Social Model*, 12 *DISABILITY & SOC'Y* (1997) (advocating for a social model of disability studies); Colin Barnes, *Understanding the Social Model of Disability*, in *ROUTLEDGE HANDBOOK OF DISABILITY STUDIES* (Nick Watson & Simo Vehmas eds., 2012) (addressing debates over the social model of disability); Mike Oliver, *The Social Model of Disability Thirty Years On*, 28 *DISABILITY & SOC'Y* 1024, 1024–26 (2013) (discussing the social model within the context of an economic recession).

17. See Rob Imrie & Huw Thomas, *The Interrelationships Between Environment and Disability*, 13 *LOC. ENV'T* 477–83 (2008); Fenney & Snell, *supra* note 10; *DISABILITY STUDIES AND THE ENVIRONMENTAL HUMANITIES: TOWARD AN ECO-CRIP THEORY* (Sarah Jaquette Ray & Jay Sibara eds., 2017).

efforts taken to combat them may affect persons with disabilities.<sup>18</sup> A rights-based understanding conceives of persons with disabilities as rights bearers, entitled to legal protection against discrimination and to achieve substantive equality with their peers without disabilities.<sup>19</sup> This framework recognizes impairments as part of human diversity and that people with disabilities may require support not only due to socially constructed barriers, but also because of an underlying physiological impairment.<sup>20</sup>

As a result, a disability rights approach requires not only the elimination of discrimination, but also the adoption of measures that address the physical, economic, institutional, and social barriers that hinder the full enjoyment of rights by disabled persons.<sup>21</sup> Finally, the human rights model of disability adopts an intersectional approach that takes into account the role that other forms of marginalization and discrimination may play in disadvantaging women, children, and ethnic minorities with disabilities.<sup>22</sup>

The human rights model of disability is enshrined throughout the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD).<sup>23</sup> Adopted in 2008, this international treaty has been ratified by 180 parties,<sup>24</sup> and it both clarifies and codifies human rights that apply to people with disabilities.<sup>25</sup> The UNCRPD is guided by the core principles of equality and nondiscrimination, and recognizes the difficult conditions faced by persons with disabilities who are often subject to multiple forms of discrimination due to additional statuses.<sup>26</sup> The UNCRPD also obliges State parties to prohibit all discrimination on the basis of disability and to guarantee equal and effective legal protection against any discrimination.<sup>27</sup> To that end, the UNCRPD specifically includes obligations to

18. Theresia Degener, *Disability in a Human Rights Context*, 5 *LAW* 35, 35 (2016); see also Theresia Degener, *A Human Rights Model of Disability*, in *ROUTLEDGE HANDBOOK OF DISABILITY LAW AND HUMAN RIGHTS* 31–50 (Peter Blanck & Eilionóir Flynn eds., 2017).

19. See, e.g., Michael Ashley Stein & Penelope J.S. Stein, *Beyond Disability Civil Rights*, 58 *HASTINGS L.J.* 1203, 1204 (2007) (discussing how the ADA does not adequately protect persons with disabilities); Sarah Fredman, *Disability Equality A Challenge to the Existing Anti-Discrimination Paradigm*, in *DISABILITY RIGHTS IN EUROPE: FROM THEORY TO PRACTICE* (Anna Lawson & Caroline Gooding eds., 2005) (exploring legal strategies that have been adopted to achieve equality for persons with disabilities); ANDREA BRODERICK, *THE LONG AND WINDING ROAD TO EQUALITY AND INCLUSION FOR PERSONS WITH DISABILITIES: THE UNITED NATIONS CONVENTION ON THE RIGHTS OF PERSONS WITH DISABILITIES 2* (2015) (discussing how the UN Convention on the Rights of Persons with Disabilities (UNCRPD) does not provide adequate legal protection).

20. Degener, *supra* note 18, at 7–8.

21. BRODERICK, *supra* note 19, at 17.

22. Degener, *supra* note 18, at 10.

23. U.N. Convention on the Rights of Persons with Disabilities, Dec. 13, 2006, 2515 U.N.T.S. 3 [hereinafter UNCRPD].

24. U.N. Treaty Collection, Convention on the Rights of Persons with Disabilities (Aug. 24, 2009, 2:30 PM), [https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg\\_no=IV-15&chapter=4](https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=IV-15&chapter=4).

25. See Michael Ashley Stein, *Disability Human Rights*, 95 *CALIF. L. REV.* 75, 76 (2007); Frédéric Mégret, *The Disabilities Convention Human Rights of Persons with Disabilities or Disability Rights?*, 30 *HUM. RIGHTS Q.* 494, 494–95 (2008).

26. UNCRPD, *supra* note 23.

27. *Id.* art. 5.

protect women and children with disabilities from discrimination and ensure their right to equality.<sup>28</sup> The UN Committee on the Rights of Persons with Disabilities has also interpreted the UNCRPD as requiring State parties to take into account and address “all possible grounds of discrimination and their intersections.”<sup>29</sup>

The UNCRPD aims to protect a broad range of human rights held by persons with disabilities. It includes protections for civil and political rights such as the right to life, access to justice, personal liberty and security, freedom from exploitation, freedom from violence and abuse, physical and mental integrity, liberty of movement, freedom of expression and opinion, and participation in political and public life.<sup>30</sup> In addition to protecting rights that are found in other international human rights instruments, the UNCRPD also includes provisions that address the particular challenges faced by persons with disabilities, such as accessibility, independent living and inclusion in the community, personal mobility, and habilitation and rehabilitation.<sup>31</sup>

In order to protect those rights, the UNCRPD requires States to change domestic laws, policies, and regulations to recognize those rights, to consider disability rights in the development of policies and programs and consult with persons with disabilities in doing so, to adopt measures to eliminate discrimination on the basis of disability, and to promote universal design and access.<sup>32</sup> States are also required to set up national focal points, as well as an independent mechanism to facilitate and monitor the implementation of obligations under the convention.<sup>33</sup> Finally, they must also cooperate with other States, nongovernmental organizations, and international organizations to support the realization of disability rights internationally.<sup>34</sup>

Many scholars argue that the UNCRPD empowers people with disabilities to claim and defend their rights because it specifies the human rights obligations States owe persons with disabilities and offers a rigorous normative framework that can be employed for designing, implementing, and evaluating each government’s policies.<sup>35</sup> Furthermore, the UNCRPD also creates oversight mechanisms to ensure domestic compliance, including the duty for States to

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28. *Id.* arts. 6, 7.

29. U.N. Comm. on the Rights of Persons with Disabilities, *General Comment No. 6 on Equality and Non-Discrimination*, ¶ 21, U.N. Doc. CRPD/C/GC/6, at 6 (Apr. 26, 2018) [hereinafter CRPD].

30. UNCRPD, *supra* note 23, arts. 10, 13–14, 16–18, 21–22, 29. The UNCRPD also encompasses social, economic, and cultural rights that are critical to the well-being of disabled persons, including rights to respect for home and the family, education, health, work, and employment, an adequate standard of living, and participation in cultural life, recreation, leisure, and sport. *Id.* arts. 23–25, 27–28, 30.

31. *Id.* arts. 9, 19–20, 26.

32. *Id.* art. 4.

33. *Id.* art. 33.

34. *Id.* art. 32.

35. See, e.g., MARCIA RIOUX ET AL., *DISABILITY, RIGHTS MONITORING, AND SOCIAL CHANGE: BUILDING POWER OUT OF EVIDENCE* (Marcia Rioux et al. eds., 2015) (exploring the ways in which disability rights are monitored); BRODERICK, *supra* note 19, at 81 (describing the obligations of states under the UNCRPD).

regularly submit reports on their efforts to implement this treaty.<sup>36</sup> Those reports are reviewed by the Convention to the Committee on the Rights of Persons with Disabilities (CRPD), a body of independent experts that examines State reports and makes suggestions and general recommendations addressed to governments.<sup>37</sup> In addition, ninety-two countries have ratified the optional protocol to the UNCRPD, which enables the CRPD to receive and examine complaints submitted by individuals or groups that allege a violation of the Convention, and to launch inquiries into situations involving grave or systematic violations of the convention by State parties to the protocol.<sup>38</sup>

However, some scholars are skeptical of the role that international human rights law can play in addressing the structural forms of oppression that undermine the dignity and autonomy of persons with disabilities around the world.<sup>39</sup> As Meekosha and Soldatic argue, the ratification of the UNCRPD is not sufficient to ensure substantial change—the issue is its effective implementation at the local level.<sup>40</sup> For example, their review of the implementation of the UNCRPD standards in Zimbabwe reveals that the country has taken de jure steps towards realizing its UNCRPD commitments, including the portion of the 2013 Constitution of Zimbabwe that recognizes, promotes, and protects the rights of persons with disabilities.<sup>41</sup> However, Zimbabwe faces challenges in implementing these commitments, as that provision of the constitution has not translated into effective policy changes on the ground due to economic instability and limited resources.<sup>42</sup> Other developing countries also face similar challenges: A lack of empirical disability data, inadequate administrative infrastructure, insufficient intersectoral actions across governmental agencies, and limited participation by private and nonstate actors can lead to an “implementation gap.”<sup>43</sup>

Our perspective lies between these two positions. Due to the adoption of the UNCRPD and the efforts of the global disability rights movement, the rights of persons with disabilities are increasingly recognized in many countries around

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36. BRODERICK, *supra* note 19, at 81.

37. UNCRPD, *supra* note 23, art. 34.

38. Optional Protocol to the Convention on the Rights of Persons with Disabilities art. 1, Dec. 13, 2006, 2515 U.N.T.S. 44910.

39. See, e.g., Bronagh Byrne, *Hidden Contradictions and Conditionality: Conceptualisations of Inclusive Education in International Human Rights Law*, 28 *DISABILITY & SOC'Y* 232, 242 (2013).

40. Cowen Dziva et al., *Implementation of the 2006 Convention on the Rights of Persons with Disabilities in Zimbabwe: A Review*, 7 *AFRICAN J. DISABILITY* 389, 390 (2018).

41. *Id.* at 394.

42. *Id.* at 389, 392.

43. See Raymond Lang et al., *Implementing the United Nations Convention on the Rights of Persons with Disabilities: Principles, Implications, Practice and Limitations*, 5 *ALTER* 206, 206–20 (2011); Donruedee Srisuppaphon et al., *Effective Implementation of the UNCRPD by Thailand State Party: Challenges and Potential Remedies*, 17 *BMC INT'L HEALTH HUM. RTS.* 1, 8–11 (2017); Raymond Lang et al., *Policy Development: An Analysis of Disability Inclusion in a Selection of African Union Policies*, 37 *DEV. POL'Y REV.* 155, 155 (2017).

the world<sup>44</sup> and disability issues are gaining traction in international law and policy, as reflected by their inclusion in several targets under the UN Sustainable Development Goals (SDGs) (goals four, eight, ten, eleven, and seventeen).<sup>45</sup> Moreover, disability rights litigation launched at the regional and national levels in some parts of the world has served to empower persons with disabilities and protect their rights.<sup>46</sup> While we acknowledge that the UNCRPD is not without its limitations and that key gaps in implementation remain, we take the view that international disability rights law provides a helpful tool that disability activists and their allies can use in dismantling barriers to equality in their societies, including by initiating domestic litigation.<sup>47</sup>

## II. DISABILITY RIGHTS AND THE CONSEQUENCES OF CLIMATE CHANGE

Global climate change is likely to lead to the increased incidence and severity of extreme weather events, heat waves, fires, flooding, and droughts; the higher prevalence of food, water, and vector-borne diseases; and mass displacement, disrupted livelihoods, breakdowns in food systems, water shortages, and resource scarcity.<sup>48</sup> Multiple international bodies worry that climate change will directly and indirectly impact human rights at large.<sup>49</sup> Indeed, climate change is already affecting and will further undermine human rights, including the rights to life, self-determination, freedom of movement, health, housing, livelihood, food, water, sanitation, culture, and property.<sup>50</sup> This is particularly relevant to persons with disabilities, as the Intergovernmental Panel on Climate Change (IPCC) has concluded that marginalized groups are “especially vulnerable” to the detrimental effects of climate change.<sup>51</sup>

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44. Lisa Vanhala, *The Diffusion of Disability Rights in Europe*, 37 HUM. RTS. Q. 831, 831–53 (2015); see Lang et al., *Policy Development*, *supra* note 43, at 155.

45. G.A. Res. 70/1, Transforming Our World: The 2030 Agenda for Sustainable Development, at 17, 19, 21, 22, 27 (Oct. 21, 2015).

46. See generally LISA VANHALA, MAKING A RIGHTS A REALITY? DISABILITY RIGHTS ACTIVISTS AND LEGAL MOBILIZATION (2010) (exploring the ways in which disability activists in Canada and the United Kingdom were empowered).

47. Indeed, domestic litigation and activism is generally seen as key to closing the gap between human rights commitments and their implementation by scholars. See generally BETH SIMMONS, MOBILIZING FOR HUMAN RIGHTS: INTERNATIONAL LAW IN DOMESTIC POLITICS (2010) (arguing that international human rights law can contribute positively to the realization of human rights); RYAN GOODMAN & DEREK JINKS, SOCIALIZING STATES: PROMOTING HUMAN RIGHTS THROUGH INTERNATIONAL LAW (2013) (arguing that international law affects States through the process of socialization, especially as national leaders face social pressures when making decisions).

48. A. Haines et al., *Climate Change and Human Health Impacts, Vulnerability and Public Health*, 120 PUB. HEALTH 585, 585–96 (2006); Anthony Costello et al., *Managing the Health Effects of Climate Change*, 373 LANCET 1693, 1693–1733 (2009); WATTS ET AL., *supra* note 13, at 7–8.

49. H.R.C. Res. 10/4, *supra* note 1; UNFCCC COP, *supra* note 2.

50. *Understanding Human Rights and Climate Change*, *supra* note 3, at 13–25; ATAPUTTU, *supra* note 11, at 68–99.

51. Christopher B. Field et al., 2014 *Summary for Policymakers*, in *Climate Change 2014: Impacts, Adaptation, and Vulnerability, Part A: Global and Sectoral Aspects, Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change 6* (2014).

Accordingly, the Conference of the Parties to the UNFCCC, the UNHRC, and the Office of the High Commissioner for Human Rights (OHCHR) have specifically identified persons with disabilities as one of the groups most likely to be disproportionately affected by the effects of climate change.<sup>52</sup> Drawing on the definition of disability included in the UNCRPD, the vulnerability of persons with disabilities to the impacts of climate change can be understood as resulting from the combined effect of their long-term physical, mental, intellectual or sensory impairments and the multiple barriers that hinder their full participation in society.<sup>53</sup>

For the most part, the greater vulnerability of persons with disabilities to the impacts of climate change is best explained by disabling environments, policies, and cultures. Disability is most prevalent among vulnerable populations, and persons with disabilities are typically among the most marginalized and “resource poor” within a community, due to their limited access to education, income, social forums, and decision-making authorities.<sup>54</sup> As a result, persons with disabilities are neglected in the development of policies and programs for climate adaptation<sup>55</sup> and face barriers in receiving services and information in a timely manner and accessible format.<sup>56</sup>

These socially constructed barriers in the context of climate vulnerability are especially striking considering the invisibility of persons with disabilities to disaster relief and preparedness efforts in many countries around the world.<sup>57</sup> Persons with disabilities are among the most vulnerable in emergencies involving environmental hazards, with disproportionately high rates of mortality, as well as being among those least able to access emergency support.<sup>58</sup> As Abbott and Porter argue, the additional dangers faced by disabled people in the context of natural disasters relate to the added vulnerabilities that accompany poverty, the accessibility of information about risk and hazard, the design of the built environment, and attitudes towards disabled people as “the least worth saving.”<sup>59</sup>

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52. See, e.g., UNFCCC COP, *supra* note 2; H.R.C. Res. 41/21, *supra* note 7; *Relationship Between Climate Change and Human Rights*, *supra* note 3, at 22–23.

53. UNCRPD, *supra* note 23, art. 1.

54. TWIGGET AL., *supra* note 13; Ilan Kelman & Laura M. Stough, *(Dis)Ability and (Dis)Aster*, in *DISABILITY AND DISASTER* 3–14 (Ilan Kelman & Laura M. Stough eds., 2015); U.S. Global Change Research Program, *THE IMPACTS OF CLIMATE CHANGE ON HUMAN HEALTH IN THE UNITED STATES* 260 (2016); Cadeym J. Gaskin et al., *Factors Associated with the Climate Change Vulnerability and the Adaptive Capacity of People with Disability: A Systematic Review*, 9 *WEATHER, CLIMATE & SOC’Y* 801, 801 (2017).

55. Wolbring, *supra* note 9; Wolbring & Leopatra, *supra* note 9.

56. LEWIS & BALLARD, *supra* note 13, at 4; EPA, *supra* note 13.

57. Julia Watts Belser, *Disaster and Disability: Social Inequality and the Uneven Effects of Climate Change*, 30 *TIKKUN* 24, 24–26 (2015).

58. LEWIS & BALLARD, *supra* note 13, at 4; WATTS ET AL., *supra* note 13, at 8; EPA, *supra* note 13.

59. David Abbott & Sue Porter, *Environmental Hazard and Disabled People: From Vulnerable to Expert to Interconnected*, 28 *DISABILITY & SOC’Y* 839, 843 (2013).

The challenges faced by persons with disabilities are further exacerbated when they belong to another vulnerable group.<sup>60</sup> Persons with disabilities are not a homogenous group; they face complex experiences of oppression that are determined by a confluence of social and power differentials.<sup>61</sup> This is consistent with the way that scholars and practitioners understand vulnerability to climate change as resulting from preexisting social structures and relationships that are influenced by factors that intersect, cluster, and amplify such as gender, ethnicity, indigeneity, class, and age.<sup>62</sup> Among these, levels of poverty play a significant role in reducing the capacity of individuals and communities to cope with the consequences of climate change.<sup>63</sup> The OHCHR specifically recognizes that the intersection of age, gender, and disability can exacerbate the negative impacts of climate change for women and children.<sup>64</sup> For women with disabilities, there is emerging evidence they confront additional barriers to climate resilience that are generated by the patterns and norms of gender inequality.<sup>65</sup> As such, it is imperative that a disability rights approach to climate change also consider the multiple forms of oppression faced by different categories of persons with disabilities.

In what follows, we review the most significant human rights impacts of climate change for persons with disabilities. We begin by highlighting the differential consequences of climate change for the human rights of persons with disabilities, examining how climate change may undermine their rights to life, health, work, housing, food, water, and freedom of movement. We then address how climate change may affect three rights that are of special significance to the dignity of persons with disabilities, namely the rights to accessibility, living independently and inclusion in the community, and personal mobility.

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60. UCCRPD, *supra* note 23, at 6.

61. DANIEL CHAPLIN ET AL., INTERSECTIONAL APPROACHES TO VULNERABILITY REDUCTION AND RESILIENCE BUILDING 4 (2019).

62. *Id.*; Hasheem Mannan et al., *Core Concepts of Human Rights and Inclusion of Vulnerable Groups in the Disability and Rehabilitation Policies of Malawi, Namibia, Sudan, and South Africa*, 23 J. DISABILITY POL'Y STUD. 67, 77 (2012); Lori Peek & Laura M. Stough, *Children with Disabilities in the Context of Disaster: A Social Vulnerability Perspective*, 81 CHILD DEV. 1260, 1261 (2010); Gaskin et al., *supra* note 54, at 801, 805.

63. Barry Smit & Johanna Wandel, *Adaptation, Adaptive Capacity and Vulnerability*, 16 GLOBAL ENVTL. CHANGE 282, 282–92 (2006); W. Neil Adger et al., *Adaptation to Climate Change in the Developing World*, 3 PROGRESS DEV. STUD. 179, 179–95 (2015).

64. OHCHR, *Analytical Study on Gender-Responsive Climate Action For the Full and Effective Enjoyment of the Rights of Women*, U.N. Doc. A/HRC/41/26, at 3 (May 6, 2016); OHCHR, *Analytical Study on the Relationship Between Climate Change and the Full and Effective Employment of the Rights of Children*, U.N. Doc. A/HRC/35/13, at 8 (May 4, 2017) [hereinafter *Climate Change and Rights of Children*].

65. Kett & Cole, *supra* note 13, at 47–50; UNESCO INCLUSIVE POLICY LAB, *DISABILITY INCLUSION IN DISASTER RISK REDUCTION: EXPERIENCES OF PEOPLE WITH DISABILITIES IN VANUATU DURING AND AFTER TROPICAL CYCLONE PAM AND RECOMMENDATIONS FOR HUMANITARIAN AGENCIES* vi (2017).

*A. Climate Change Will Disproportionally Impact People with Disabilities and Undermine Their Human Rights*

Climate change has a number of adverse implications for the human rights of persons with disabilities. In this Part, we list some of the most significant rights that are already being impacted by climate change and discuss how climate change could further endanger those rights. While climate change will undermine these rights for the population as a whole, we argue that persons with disabilities are disproportionately and uniquely affected by the consequences of climate change.

To begin, climate change may affect the right to life, which is enshrined in Article 6 of the International Covenant on Civil and Political Rights.<sup>66</sup> The right to life is also specifically protected in Article 10 of the UNCRPD, which requires States to take all necessary measures to ensure that persons with disabilities achieve equality with people without disabilities.<sup>67</sup> The UN Human Rights Committee has clarified that in addition to prohibiting the arbitrary deprivation of life, the right to life also imposes a positive duty on States to adopt measures that are conducive to life.<sup>68</sup> Indeed, there is generally a “due diligence obligation” on States to take positive measures in response to reasonably foreseeable threats to life by State actors, private entities, and foreign organizations.<sup>69</sup> For example, States must take adequate measures of protection to prevent arbitrary deprivations of life by private entities, such as transportation companies and hospitals.<sup>70</sup> For persons with disabilities specifically, such measures should include ensuring equal access to essential services and facilities as well as preventing unwarranted use of force by law enforcement agents against them.<sup>71</sup>

Climate change, and its accompanying weather-related disasters, are already having devastating effects on people’s right to life, particularly in the developing world.<sup>72</sup> The changing climate also affects the right to life in more indirect ways.<sup>73</sup> Indeed, the World Health Organization has projected that climate change will cause approximately 250,000 additional deaths per year in the period from 2030 to 2050 due to increased malnutrition, malaria, dengue,

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66. International Covenant on Civil and Political Rights (ICCPR) art. 6 and 4(2), Dec. 19, 1966, 99 U.N.T.S. 171; G.A./ Res. 217 (III) A, Universal Declaration of Human Rights, art. 3 (Dec. 10, 1948).

67. UNCRPD, *supra* note 23, art. 10.

68. U.N. Human Rights Committee, General Comment No. 36 (2018) on Article 6 of the International Covenant on Civil and Political Rights, On the Right to Life, Part III, U.N. Doc. CCPR/C/GC/36 (Oct. 30, 2018). It is worth noting here that the UN Human Rights Committee has clarified that though State parties may adopt measures to regulate voluntary terminations of pregnancies, such measures should not violate the right to life of a pregnant woman and States should not introduce barriers to accessing safe abortions. *Id.* at 2.

69. *Id.* at 5.

70. *Id.*

71. *Id.* at 6.

72. *Relationship Between Human Rights and Climate Change*, *supra* note 3, at 9.

73. ATAPUTTU, *supra* note 11, at 76.

diarrhea, and heat stress alone,<sup>74</sup> while a study commissioned by the Climate Vulnerable Forum placed the figure at an additional 700,000 deaths per year by 2030.<sup>75</sup> The same study found that climate change is currently responsible for 400,000 deaths per year.<sup>76</sup> Persons with disabilities are especially vulnerable, as evidenced by a disproportionately higher mortality rate during natural disasters and extreme weather events.<sup>77</sup> Similarly, a metareview found that persons with mental health impairments are more than three times more likely to die in heat waves than the general population.<sup>78</sup> As discussed above, this vulnerability can be attributed to existing social and health inequalities, as well as a combination of personal and environmental factors that limit their adaptive capacity and ultimately impede their ability to enjoy the rights afforded to them by the UNCRPD.<sup>79</sup>

Climate change will threaten people with disabilities' right to health.<sup>80</sup> This right, recognized in Article 25 of the UNCRPD, provides that persons with disabilities have the right to "enjoyment of the highest attainable standard of health without discrimination based on disability."<sup>81</sup> Indeed, climate change is already having a negative impact on health and projected climate change scenarios will result in a range of worsening health impacts, including greater risk of injury, disease, and death due to more intense heat waves and fires; increased risk of under-nutrition from diminished food production; and increased risk of food-, water-, and vector-borne diseases.<sup>82</sup> Additionally, climate change poses significant risks to mental health, such as how climate change disasters are associated with an increase in stress-related psychiatric disorders.<sup>83</sup> Increased psychological distress and impaired mental health have also been linked to a range of other climate impacts, including slow-onset events such as drought, economic stressors, and climate-induced migration.<sup>84</sup>

While climate change will impact these rights for everyone regardless of disability, people with disabilities will have a harder time adapting due to the social determinants on health vulnerabilities and the many barriers that they face

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74. WORLD HEALTH ORGANIZATION, QUANTITATIVE RISK ASSESSMENT OF THE EFFECTS OF CLIMATE CHANGE ON SELECTED CAUSES OF DEATH, 2030s AND 2050s 13 (Simon Hales et al. eds., 2014).

75. DARA AND THE CLIMATE VULNERABLE FORM, CLIMATE VULNERABILITY MONITOR 2ND EDITION: A GUIDE TO THE COLD CALCULUS OF A HOT PLANET 17 (Matthew McKinnon ed., 2012).

76. *Id.*

77. Gaskin et al., *supra* note 54, at 802.

78. Abderrezak Bouchama et al., *Prognostic Factors in Heat Wave-Related Deaths: A Meta-Analysis*, 167 ARCHIVES INT'L MED. 2170, 2172 (2007).

79. Gaskin et al., *supra* note 54, at 811.

80. OHCHR, Analytical Study on the Relationship Between Climate Change and the Human Right of Everyone to the Enjoyment of the Highest Attainable Standard of Physical and Mental Health, U.N. Doc. A/HRC/32/23, at 4–8 (May 6, 2016); UNCESCR, CESCR General Comment No. 14, U.N. Doc. E/C.12/2000/4, at 2 (Aug. 11, 2000).

81. UNCRPD, *supra* note 23, art 25.

82. U.N. Environment Program, *Climate Change and Human Rights*, 15-03762/100 at 8 (2015).

83. *See, e.g.*, Susanta Kumar Padhy et al., *Mental Health Effects of Climate Change*, 19 INDIAN J. OCCUPATIONAL & ENVTL. MED. 3, 3 (2015).

84. *Id.*

in terms of accessing health care.<sup>85</sup> First, people with certain preexisting health conditions and long-term chronic illnesses are more likely to be affected by some of the gradual, slow-onset changes to the climate.<sup>86</sup> For example, individuals with allergies or respiratory conditions such as chronic obstructive pulmonary disease and asthma will experience intensified symptoms due to increased exposure to air pollutants (ozone, fine particles, and aeroallergens).<sup>87</sup> Second, the increase in average temperature can negatively influence the health of individuals that have conditions that impair thermoregulation or make them more sensitive to heat,<sup>88</sup> such as multiple sclerosis, spinal cord injuries, and cerebral palsy.<sup>89</sup> Third, individuals who are on medications for physical or mental health can also be impacted by rising temperatures.<sup>90</sup> Medications that are used to treat mental health disorders, such as antipsychotics and antidepressants, can impair body temperature regulation, fluid levels, and electrolyte balance, ultimately interfering with the body's ability to thermoregulate.<sup>91</sup> Similarly, drugs that treat cardiovascular diseases, such as diuretics and beta blockers, can hinder resilience to extreme heat.<sup>92</sup>

Natural disasters resulting from climate change can also particularly exacerbate existing health conditions for persons with disabilities, as those events disrupt the availability of food, health care, secure shelter, and important social relations.<sup>93</sup> Individuals with chronic health issues have specific medical and functional needs that can be disrupted by these events<sup>94</sup>—ischemic stroke survivors require anticoagulants, patients with diabetes need insulin, individuals with lung disease receive supplemental oxygen, and those with kidney failure undergo regular hemodialysis.<sup>95</sup> Additionally, those with cognitive conditions,

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85. WATTS ET AL., *supra* note 13, at 8; *see also* Christa Van Kraayenoord, *Environmental Pollution, Environmental Health and Disabilities*, 55 INT'L J. DISABILITY, DEV., & EDUC. 1, 1–4 (2008) (describing how economic growth results in industrial pollution, which can lead to disabilities); Kelly Firtsch, *Toxic Pregnancies Speculative Futures, Disabling Environments, and Neoliberal Biocapital*, in DISABILITY STUDIES AND THE ENVIRONMENTAL HUMANITIES: TOWARD AN ECO-CRIP THEORY (Sarah Jaquette Ray & Jay Sibara eds., 2017).

86. *See generally* Olutayo Odunola et al., *Climate Change Evidence and Effects of Climate-Change-Related Diseases on Children's Health*, 28 ENVTL. QUALITY MGMT. 47, 47–55 (2018) (describing temporary diseases in children).

87. U.S. GLOBAL CHANGE RESEARCH PROGRAM, *Populations of Concern*, in THE IMPACTS OF CLIMATE CHANGE ON HUMAN HEALTH IN THE UNITED STATES 250 (2016); *see generally* Odunola et al., *supra* note 86, at 49–51 (discussing the impact of climate change related diseases in areas with poor air quality).

88. S. J. Yoon et al., *Measuring the Burden of Disease Due to Climate Change and Developing a Forecast Model in South Korea*, 128 PUB. HEALTH 725, 725 (2014).

89. Gaskin et al., *supra* note 54, at 810.

90. *Id.* at 802; U.S. GLOBAL CHANGE RESEARCH PROGRAM, *supra* note 87, at 220.

91. U.S. GLOBAL CHANGE RESEARCH PROGRAM, *supra* note 87, at 261.

92. *Id.*

93. Odunola et al., *supra* note 86, at 47.

94. U.S. GLOBAL CHANGE RESEARCH PROGRAM, *supra* note 87, at 220.

95. Ali H Mokdad et al., *When Chronic Conditions Become Acute Prevention and Control of Chronic Diseases and Adverse Health Outcomes During Natural Disasters*, 2 PREVENTING CHRONIC DISEASE 1, 1–4 (2005).

such as Alzheimer's disease and dementia, may have impaired judgement and decision making, heightening vulnerability in crisis situations.<sup>96</sup>

Climate change also affects the right to work and employment, defined under Article 27 of the UNCRPD as encompassing the right to the opportunity to freely work in an work environment that is "open, inclusive and accessible to persons with disabilities."<sup>97</sup> Climate change may undermine this right in the general population due to the different ways in which climate impacts may lead to a decline of different economic sectors and result in an increase in unemployment.<sup>98</sup> Severe weather events leading to the destruction of infrastructure and displacement will also have important economic consequences and may directly affect the right to work,<sup>99</sup> while slow-onset events such as increased temperatures, rainfall variability, and water salinization will impact agricultural livelihoods<sup>100</sup> and access to safe working conditions.<sup>101</sup> The impacts of climate change on the right to work are amplified for persons with disabilities, who already face significant barriers to employment<sup>102</sup> and who are especially vulnerable to the risks and hazards associated with environmental degradation.<sup>103</sup> Indeed, a recent study examining the challenges faced by persons

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96. U.S. GLOBAL CHANGE RESEARCH PROGRAM, *supra* note 87, at 220; Gaskin et al., *supra* note 54, at 810.

97. UNCRPD, *supra* note 23, art. 27.

98. For example, with the expected bleaching of coral reefs due to increased temperatures and ocean acidification, and with changes to ecosystems and wildlife stocks, the tourism industry in certain locations may decline resulting in the loss of employment. Similarly, changes in ocean acidity and temperature may impact fisheries and the livelihoods of fisherfolk due to the collapse or migration of fish stocks. Field et al., *supra* note 51, at 17.

99. U.N. Environmental Program, *supra* note 82, at 7.

100. Marek Harsdorff et al., U.N. Int'l Labor Org., *Employment Working Paper No. 104 Towards an ILO Approach to Climate Change Adaptation* (2011).

101. See U.N. Environmental Program, *supra* note 82, at 8; John H. Knox, *Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment*, U.N. Doc. A/HRC/31/52, at 7 (Feb. 1, 2016).

102. A recent International Labour Organization report establishes that the percentage of persons with disabilities who participate in the labor market is significantly lower than that of persons without disabilities (60 percent compared to 82 percent). Further, the rate of unemployment among women with disabilities aged 20-64 is much higher than able-bodied women (18.8 percent compare to 10.6 percent). The report highlights several challenges faced by persons with disabilities when accessing the labor market—it points to accessibility barriers in built environments, transport, products and services; inaccessible work premises and work tools; and noninclusive education and vocational training. Generally, misconceptions about work and disability persist, as many employers believe that hiring persons with disabilities could result in a loss of productivity and negatively impact the financial results of their companies. U.N. Int'l Labor Org. & Fundación Once, *Making the Future of Work Inclusive of People with Disabilities*, 7–8, 10–11 (2019).

103. Impacts from climate change will exacerbate existing challenges confronted by persons with disabilities. For example, those with limited mobility and health conditions may find that heat stress will cause manual labor to become increasingly hazardous. Extreme weather events can result in other serious effects on those with disabilities, including injury, loss of accessibility, or damages to assistive devices, which can severely impact livelihood and employment. Finally, when there are reduced employment opportunities due to economic losses resulting from climate disasters, persons with disabilities will especially struggle to find work if employers have misconceptions about their work capacities. See U.N. Int'l Labor Org., *Persons with Disabilities in a Just Transition to a Low-Carbon Economy* 3–4 (2019);

with disabilities in postdisaster Nepal found that following the 2015 earthquakes, there was a pronounced decrease in self-employment in agriculture.<sup>104</sup> Further, the study found that a limited number of persons with disabilities participated in postdisaster recovery-oriented short-term employment opportunities due to both perceived and real limitations.<sup>105</sup> These opportunities included cash-for-work schemes such as the United Nations Development Program Safe Demolition and Debris Program and food-for-work road restoration programs.<sup>106</sup> In the absence of inclusive disaster risk readiness efforts, future natural disasters could reinforce the economic exclusion of disabled people.

Climate change will affect the right to adequate housing,<sup>107</sup> which includes the rights of security of tenure, protection against forced evictions, the availability of services, accessibility, and cultural adequacy.<sup>108</sup> Like some of these other rights, people may feel the risk of this regardless of their disability. The OHCHR has observed that sea-level rise and storm surges are having a direct impact on a number of coastal settlements, threatening homes, critical infrastructure, and other services.<sup>109</sup> Settlements in low-lying mega deltas are also particularly at risk, “as evidenced by the millions of people and homes affected by flooding in recent years.”<sup>110</sup> Persons with disabilities are often a more vulnerable group who frequently do not have the adaptive capacity nor the financial protection to move to better quality housing or less dangerous areas.<sup>111</sup> This issue is compounded with challenges in finding homes that are designed in an accessible manner, which may further undermine the availability of adequate shelter and housing as the climate displaces more people.<sup>112</sup>

Climate change also has serious implications for the right to food, which is recognized in the UNCRC under Article 28.<sup>113</sup> As has been recognized by numerous international experts and bodies, climate change is progressively

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see also U.N. Int'l Labor Org., *The Employment Impact of Climate Change Adaptation Input Document for the G20 Climate Sustainability Working Group* 14 (2018).

104. AUSTIN LORD ET AL., A STUDY OF THE CHALLENGES FACED BY PERSONS WITH DISABILITIES IN POST-EARTHQUAKE NEPAL 28 (2016).

105. *Id.* at 29.

106. *Id.*

107. International Covenant on Economic, Social and Cultural Rights (ICESCR) art. 11, Jan. 3, 1976, 993 U.N.T.S. 3.

108. ATAPUTTU, *supra* note 11, at 79; UNCRC, *supra* note 23, art. 28.

109. *Relationship Between Human Rights and Climate Change*, *supra* note 3, at 13.

110. *Id.*

111. See, e.g., David Dodman & David Satterthwaite, *Institutional Capacity, Climate Change Adaptation and the Urban Poor*, 39 IDS BULL. 67, 69 (2009) (mentioning disability in the context of low-income vulnerable communities).

112. Laura Hemingway & Mark Priestley, *Natural Hazards, Human Vulnerability and Disabling Societies: A Disaster for Disabled People?*, 2 REV. DISABILITY STUD.: INT'L. J. 55, 62 (2006); Marilyn Werber Serafini, *For People with Disabilities, a Fight for Access to Housing*, 37 HEALTH AFF. 346, 346 (2018); Nadia Ahmed, *Paralympics 2012 Legacy: Accessible Housing and Disability Equality or Inequality?*, 28 DISABILITY & SOC'Y 129, 130 (2013).

113. UNCRC, *supra* note 23, art. 28.

threatening food security in many parts of the world.<sup>114</sup> The IPCC has thus stated that all aspects of food security are potentially affected by climate change, including food access, utilization, and price stability.<sup>115</sup> Variability in rainfall, changes in the suitability of arable land, pests, and drought are projected to increase crop losses and reduce agricultural production, thereby affecting the availability of food.<sup>116</sup> Extreme weather events such as floods, droughts, and extreme rainfall can impact access to food by damaging crop yields and damaging infrastructure.<sup>117</sup> These factors can in turn lead to higher levels of malnutrition, wasting, and micronutrient deficiency.<sup>118</sup> Moreover, climate change is projected to “further erode food security, and prolong existing and create new poverty traps, . . . particularly in urban areas and emerging hotspots of hunger.”<sup>119</sup> As a result, the impacts of climate change on the right to food will have a disproportionate effect on persons with disabilities and their families, who tend to be affected by food shortages and malnutrition at higher levels than the general population.<sup>120</sup>

Climate change will also undermine the right to water. This right, recognized under Article 28 of the UNCRPD, highlights equal access to clean water services as a measure to ensure social protection for persons with disabilities.<sup>121</sup> The loss of glaciers and reductions in snow cover are projected to negatively affect populations supplied by melt water from mountain ranges,<sup>122</sup> while extreme weather events, increased temperatures, changes in precipitation, and sea level rise will also impact water supplies for human consumption and agriculture and harm freshwater ecosystems.<sup>123</sup> Moreover, the extent to which the right to water is affected will increase as the global mean temperature increases. The IPCC has estimated that a 1°C temperature rise would result in approximately 8 percent of the world population experiencing a severe reduction in water resources, while that percentage would rise to 14 percent at 2°C warming.<sup>124</sup> The scarcity of water can be further amplified for persons with disabilities who already face barriers accessing safe water—for instance,

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114. See, e.g., OHCHR, Report of the Special Rapporteur on the Right to Food, Jean Ziegler, U.N. Doc. A/HRC/7/5, at 16 (Jan. 10, 2008); OHCHR, Report of the Special Rapporteur on the Right to Food: Mission to Bolivia, U.N. Doc. A/HRC/7/5/Add.2, at 7–8 (Jan. 30, 2008); Knox, *supra* note 101, at 26.

115. Field et al., *supra* note 51, at 18.

116. See, e.g., JAVIER BORNSTEIN ORTEGA & CHRISTINE KLAUTH, CLIMATE LANDSCAPE ANALYSIS FOR CHILDREN IN THE PHILIPPINES 2 (2017); Knox, *supra* note 101, at 26.

117. ORTEGA & KLAUTH, *supra* note 116, at 20.

118. *Id.*

119. Field et al., *supra* note 51, at 6–8, 20; see also COLUMBIA LAW SCHOOL & HUMAN RIGHTS INSTITUTE, CLIMATE CHANGE AND THE RIGHT TO FOOD 14 (Heinrich Böll Foundation ed., 2009).

120. SMITH ET AL., *supra* note 13, at 25; Gaskin et al., *supra* note 54, at 810.

121. UNCRPD, *supra* note 23, art. 28.

122. *Relationship Between Human Rights and Climate Change*, *supra* note 3, at 11.

123. *Id.*; U.N. Environmental Program, *supra* note 82, at 3.

124. Field et al., *supra* note 51, at 250.

physical accessibility to water sources can be affected by extreme weather events.<sup>125</sup>

The right to adequate sanitation is also threatened by climate change, which is inseparable from the right to water, as poor sanitation is the primary cause of water contamination and diseases linked to water.<sup>126</sup> Climate change effects such as rising sea levels, tropical storms, heat stress, extreme precipitation, flooding, and landslides will all have serious impacts on infrastructure and services related to sanitation and will in many cases exacerbate existing vulnerabilities.<sup>127</sup> Again, these impacts are heightened for persons with disabilities, as they face preexisting social and economic barriers to accessing water for consumption and sanitation.<sup>128</sup> Moreover, if public health messages are not designed in an accessible format, water boiling advisories will not reach individuals with reduced hearing, vision, or mental capacity.<sup>129</sup> In addition, persons with certain chronic health conditions may be more sensitive to water-borne pathogens and the increased incidence of such pathogens may thus significantly reduce the safety of water supplies.<sup>130</sup>

Finally, climate change is likely to curtail the freedom of movement of populations around the world, most notably impacting the right not to be displaced, due to the increased incidence of severe weather events and slow-onset environmental changes.<sup>131</sup> It is estimated that over 200 million people could be displaced by climate change by 2050.<sup>132</sup> The impacts of climate-induced migration and displacement are amplified for persons with disabilities, as climate change erodes and disrupts already strained facilities, services, and infrastructure, as well as the limited support networks and livelihood opportunities on which persons with disabilities depend.<sup>133</sup> For these disabled persons, the possibility of resettlement is often limited; many require particular support systems (like personal assistants, medical equipment, or service animals) that are difficult to transport to a new location<sup>134</sup> and are highly dependent on essential services such as water or electricity.<sup>135</sup> In addition, persons with disabilities face numerous barriers to migration to other countries, including

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125. SMITH ET AL., *supra* note 13, at 25.

126. Committee on Economic and Social Rights, General Comment No 15, U.N. Doc. E/C.12/2002/11, at 11 (Nov. 26, 2002).

127. U.N. Environmental Program, *supra* note 82, at 5.

128. SMITH ET AL., *supra* note 13, at 25.

129. EPA, *supra* note 13, at 3.

130. SMITH ET AL., *supra* note 13, at 25.

131. ATAPUTTU, *supra* note 11, at 85.

132. OLI BROWN, MIGRATION RESEARCH SERIES: MIGRATION AND CLIMATE CHANGE 9, (Ilse Pinto-Dobernig ed., 2008); NICHOLAS STERN, STERN REVIEW: THE ECONOMICS OF CLIMATE CHANGE 56 (2006); Norman Myers, *Environmental Refugees: A Growing Phenomenon of the 21st Century*, 357 PHIL. TRANSACTIONS ROYAL SOC'Y BIOLOGICAL SCI. 609, 609 (2002).

133. LEWIS & BALLARD, *supra* note 13, at 4.

134. Alex Ghenis, *Climate Change, Migration and People with Disabilities*, WORLD INSTITUTE ON DISABILITY (2015); Kelman & Stough, *supra* note 54, at 3–14.

135. *Id.* at 19.

discriminatory immigration policies.<sup>136</sup> For example, in Canada, immigration policies have traditionally been based on the economic needs of the country, and this criterion ultimately impacts the way in which immigration applications are processed.<sup>137</sup> El-Lahib and Wehbi argue that in Canada, persons with disabilities continue to be considered economic burdens on the system, and as such, face ableism in the selection process and merit point system.<sup>138</sup> This situation is not unique to Canada—economic concerns are central to immigration policies in many countries and often result in the exclusion of persons with disabilities.<sup>139</sup> Furthermore, once resettled, persons with disabilities often struggle to find employment or seek education and are faced with inadequate social services<sup>140</sup> and the interruption of access to health services. For example, in Canada, refugees are granted temporary health care through the Interim Federal Health Program,<sup>141</sup> but climate migrants who do not qualify under this program and seek permanent residency may have to wait to receive federal health care. This poses a significant risk for persons with disabilities.<sup>142</sup>

*B. Climate Change Has Adverse Implications for People with Disabilities' Rights to Accessibility, Independent Living, and Personal Mobility*

The consequences of climate change also have adverse implications for three rights that are of special significance to persons with disabilities: accessibility; living independently and being included in the community; and personal mobility. Although they build on existing human rights that are recognized for the population as a whole, the UNCRPD is the only international human rights treaty to explicitly recognize these *sui generis* rights that are understood as responding to the unique challenges faced by persons with disabilities in society and therefore critical to their dignity and equality.<sup>143</sup>

The recognition of the right to accessibility is included as a general principle under Article 3 of the UNCRPD, in addition to underpinning a number of other rights, such as the rights to work and rights to employment, rehabilitation,

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136. Nilan G. Yu, *Ableism and Economic Rationalism in Australian Immigration*, 23 INT'L. J. SOC. WELFARE 254, 254 (2014); Yahya El-Lahib & Samantha Wehbi, *Immigration and Disability Ableism in the Policies of the Canadian State*, 55 INT'L. SOC. WORK 95, 102–14 (2012); K. Soldatic & L. Fiske, *Bodies Locked Up' Intersections of Disability and Race in Australian Immigration*, 24 DISABILITY & SOC'Y 28, 28 (2008).

137. El-Lahib & Wehbi, *supra* note 136, at 96.

138. *Id.*

139. Yu, *supra* note 136, at 255.

140. El-Lahib & Wehbi, *supra* note 136 at 96.

141. GOVERNMENT OF CANADA, INTERIM FEDERAL HEALTH PROGRAM POLICY (last updated Aug. 19, 2019), <https://www.canada.ca/en/immigration-refugees-citizenship/corporate/mandate/policies-operational-instructions-agreements/interim-federal-health-program-policy.html>.

142. Ghenis, *supra* note 134, at 19.

143. Mégret, *supra* note 25 at 509–11.

education, and health.<sup>144</sup> Article 9 addresses the right to accessibility; specifically, requiring States, at the domestic level, to take “appropriate measures” to ensure to persons with disabilities access to the physical environment, including transportation, information, and other facilities and services open to the public.<sup>145</sup>

The right to accessibility is a precondition for the realization of other rights in the convention; without it, “the other rights guaranteed in the UNCRPD become worthless.”<sup>146</sup> Article 9(2) also lists a number of specific measures that States must take with respect to ensuring accessibility, including, *inter alia*, the development and implementation of minimum standards and guidelines for the accessibility of facilities and services open or provided to the public; the provision of training for stakeholders on accessibility issues facing persons with disabilities; and the promotion of other appropriate forms of assistance and support to persons with disabilities to ensure their access to information and to new communications technologies and systems. This is particularly relevant in the context of climate change, as systems designed to provide assistance during emergencies are often inaccessible to persons with disabilities.<sup>147</sup> Furthermore, slow-onset impacts as well as extreme weather events can erode existing infrastructure and place increased pressure on national budgets, ultimately limiting resources to provide accessible services to persons with disabilities.<sup>148</sup> Climate change-induced migration can also impact the right to accessibility for persons with disabilities by limiting their access to health care, support systems, and required services.<sup>149</sup> Finally, inaccessible physical environments can prevent persons with disabilities from engaging in everyday activities and entering important spaces (such as schools), ultimately resulting in social spatial exclusion.<sup>150</sup>

Persons with disabilities also have the right to live independently and be included in the community.<sup>151</sup> To this end, Article 19 of the UNCRPD provides that States have an obligation to recognize the equal right of all persons with disabilities to “live in the community,” and must take measures to facilitate “full enjoyment” by persons with disabilities of this right and their full inclusion in

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144. VALENTINA DELLA FINAL ET AL., *THE UNITED NATIONS CONVENTION ON THE RIGHTS OF PERSONS WITH DISABILITIES: A COMMENTARY* 226–27 (Springer 2017).

145. UNCRPD, *supra* note 23, art. 9.

146. FINAL ET AL., *supra* note 144, at 231.

147. Gaskin et al., *supra* note 54, at 811.

148. LEWIS & BALLARD, *supra* note 13, at 4–5.

149. Mia A. Benevolenza & LeaAnne DeRigne, *The Impact of Climate Change and Natural Disasters on Vulnerable Populations: A Systematic Review of Literature*, 29 J. HUM. BEHAV. SOC. ENV'T. 266, 266–81 (2019).

150. Sally Lindsay & Nicole Yantzi, *Weather, Disability, Vulnerability, and Resilience: Exploring How Youth with Physical Disabilities Experience Winter*, 36 DISABILITY & REHABILITATION 2195, 2198 (2014).

151. CRPD, *General Comment No. 5 on Article 19: Living Independently and Being Included in the Community*, U.N. Doc. CRPD/C/18/1, at 1 (Aug. 2017).

the community.<sup>152</sup> Living independently and being included in the community means maximizing self-determination and independence in society by exercising freedom of choice and control over decisions affecting one's life.<sup>153</sup> To realize this right, Article 19 provides that States should ensure the choice of residence for persons with disabilities, the prohibition of forced living arrangements, and the prohibition of forced institutionalization and deinstitutionalization; the provision of individualized support services; and the accessibility of mainstream community services.<sup>154</sup> Although the right to live independently and be included in the community "has no exact analogue in other human rights conventions,"<sup>155</sup> it is rooted in international human rights law, including civil, political, economic, social, and cultural rights.<sup>156</sup> As such, certain obligations under Article 19, such as the right to choose one's residence, are immediately applicable, while others, such as the right to access individualized support services, are progressively applicable.<sup>157</sup> The right to live independently and be included in the community is often impaired following extreme weather events, which will be exacerbated by climate change. Both during and after natural disasters, persons with disabilities may struggle to access housing, transportation, necessary medical services, employment, and essential communications channels, ultimately undermining their right to live independently.<sup>158</sup> For instance, relocated Hurricane Katrina survivors reported difficulties living independently, as their new locations did not accommodate their transportation needs.<sup>159</sup>

Under Article 20 of the UNCRPD, States are required to ensure personal mobility with the greatest possible independence for persons with disabilities.<sup>160</sup> These rights include: (i) facilitating the personal mobility of persons with disabilities in the manner and at the time of their choice, and at affordable cost; (ii) facilitating access by persons with disabilities to quality mobility aids, devices, assistive technologies, including by making them available at affordable cost; (iii) providing training in mobility skills to persons with disabilities and to specialist staff working with persons with disabilities; and (iv) encouraging entities that produce mobility aids, devices, and assistive technologies to take into account all aspects of mobility for persons with disabilities.<sup>161</sup> For persons with disabilities, the right to personal mobility is especially at risk in the context

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152. UNCRPD, *supra* note 23, art. 19.

153. CRPD, *supra* note 151, at 3.

154. UNCRPD, *supra* note 23, art. 19.

155. VALENTINA ET AL., *supra* note 144, at 361.

156. CRPD, *supra* note 151, at 3.

157. *Id.* at 11.

158. Michael H. Fox et al., *The Psychosocial Impact of Hurricane Katrina on Persons with Disabilities and Independent Living Center Staff Living on the American Gulf Coast.*, 55 REHABILITATION PSYCHOL. 231, 237 (2010); Laura M. Stough et al., *Barriers to the Long-Term Recovery of Individuals with Disabilities Following a Disaster*, 40 DISASTERS 387, 389–91 (2016).

159. Stough et al., *supra* note 158, at 398.

160. UNCRPD, *supra* note 23, art. 20.

161. *Id.*

of climate change. For example, the effects of acute weather events such as fallen trees and buildings can create obstacles that hinder the mobility of persons with physical mobility or visual impairments.<sup>162</sup> Erratic weather patterns can also undermine the right to personal mobility due to unpredictable and unexpected changes in the conditions of roads, paths, and sidewalks that may be flooded, frozen over, packed with snow, or have otherwise deteriorated as a result.<sup>163</sup> The resulting safety implications are significant for persons with limited mobility, such as those using wheelchairs. In addition to the risk of falling or getting stuck, persons with disabilities face safety risks when finding alternative routes, such as major roads.<sup>164</sup> There are similar risks to using public transportation during extreme winter conditions: Often, ramps and lifts will freeze over, and drivers lack knowledge on how to support persons with limited mobility.<sup>165</sup> Moreover, heatwaves may prevent persons that are sensitive to heat due to chronic health conditions from leaving their homes and accessing the services they require.<sup>166</sup> Finally, the evacuation needs of persons with disabilities are often not considered in emergency planning.<sup>167</sup> For instance, a review of the response to Hurricane Katrina and Hurricane Rita revealed that evacuation buses were not equipped with wheelchair lifts.<sup>168</sup>

### III. DISABILITY RIGHTS AND CLIMATE GOVERNANCE

There are currently clear legal obligations and standards under international law about how governments should consult, protect, and empower persons with disabilities when it comes to climate change. The 2015 Paris Agreement states that when Parties work on addressing climate change, they should “respect, promote and consider” their obligations to several human rights, including the rights of persons with disabilities and people in vulnerable situations.<sup>169</sup> Over the past decade, numerous international experts and bodies have also recognized the profound repercussions of climate change for the enjoyment of human rights and have called on States to abide by their human rights obligations in the context of climate change.<sup>170</sup>

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162. SMITH ET AL., *supra* note 13, at 25.

163. Philippa J. Clarke et al., *The Impact of Weather on Mobility and Participation in Older US Adults*, 105 AM. J. PUB. HEALTH 1489, 1492–93 (2015); Kelda Yuen, *Watch This York Student Struggle to Get to Class in a Wheelchair Due to Uncleared Snow*, CBC NEWS (Feb. 2, 2019), <https://www.cbc.ca/news/canada/toronto/watch-this-york-student-struggle-to-get-to-class-in-a-wheelchair-due-to-uncleared-snow-1.5003306>.

164. Lindsay & Yantzi, *supra* note 150, at 2199.

165. *Id.*

166. Lynette Cusack et al., *Heatwaves and Their Impact on People with Alcohol, Drug and Mental Health Conditions: A Discussion Paper on Clinical Practice Considerations*, 67 J. ADVANCED NURSING 915, 920 (2011).

167. TWIGG ET AL., *supra* note 13, at 6.

168. Benevolenza & DeRigne, *supra* note 149, at 274.

169. Paris Agreement, *supra* note 4.

170. See, e.g., H.R.C. Res. 7/23, *supra* note 1; H.R.C. Res. 10/4, *supra* note 1; *Relationship Between Climate Change and Human Rights*, *supra* note 3; H.R.C. Res 18/22, *supra* note 1; OHCHR, *Report of*

A disability rights approach to climate governance stresses the importance of recognizing and protecting the substantive and procedural rights held by disabled persons in the development, implementation, monitoring, and evaluation of climate policies and programs. In what follows, we discuss the different ways that disability rights may shape the responsibilities of States in the development and implementation of climate policies and initiatives. Beyond simply ensuring that the rights of persons with disabilities are not undermined by climate change and any actions adopted in response, we conceive of a disability rights approach as requiring that governments ensure that climate solutions help make societies more accessible and inclusive.

#### A. Disability Rights and Climate Mitigation

By recognizing the adverse effects of climate change for the rights of persons with disabilities, a disability rights approach clearly supports States' obligations to undertake measures to reduce carbon emissions and mitigate climate change. As has been emphasized by the OHCHR, in order to mitigate negative climate change impacts on human rights, "States have an obligation to respect, protect, fulfil and promote all human rights for all persons without discrimination."<sup>171</sup> This view applies with equal force to the particular context of persons with disabilities, and the obligations under the UNCRPD can be interpreted as obliging State parties to adopt climate mitigation policies that can prevent and minimize the human rights impacts of climate change for disabled persons in their jurisdictions. Indeed, the UNCRPD specifically commits State parties to account for the protection and promotion of the human rights of persons with disabilities in all policies and programs.<sup>172</sup> As has been stated in the context of a children's rights approach to climate change, the UNCRPD can be understood as requiring State parties to reduce carbon emissions "in order to prevent to the greatest extent possible their negative human rights impacts" on persons with disabilities, including by "stopping development of the most carbon-intensive fossil fuels and transitioning to clean, renewable sources of energy."<sup>173</sup> A failure to do so could result in a violation of the UNCRPD<sup>174</sup> and

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*the Independent Expert on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment—Mapping Report*, U.N. Doc. A/HRC/25/53 (Dec. 30, 2014); OHCHR, *Mapping Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment Focus Report on Human Rights and Climate Change* (June 2014); H.R.C. Res. 26/27, *supra* note 1; H.R.C. Res. 29/15, *supra* note 1; Knox, *supra* note 101, at 26; John. H. Knox, *Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment*, U.N. Docs. A/HRC/37/58, A/HRC/37/59 (Jan. 24, 2018); Human Rights Council Res. 38/4, U.N. Doc. A/HRC/38/L.5 (July 2, 2018).

171. *Understanding Human Rights and Climate Change*, *supra* note 3, at 2.

172. UNCRPD, *supra* note 23, art. 4(1)(c).

173. *Climate Change and Rights of Children*, *supra* note 64, at 10.

174. See generally MARGARETHA WEWERINKE-SINGH, STATE RESPONSIBILITY, CLIMATE CHANGE AND HUMAN RIGHTS UNDER INTERNATIONAL LAW (2019) (explaining when state action relating to climate change could amount to a violation of human rights).

would entitle persons with disabilities to seek remedies under international human rights law.<sup>175</sup>

While the opportunities for holding States accountable for human rights violations caused by climate change are limited under the UNCRPD itself,<sup>176</sup> persons with disabilities could turn to domestic human rights mechanisms and litigation for ensuring that their rights are recognized and protected in the context of climate change.<sup>177</sup> In so doing, they could replicate the strategy and arguments adopted in the growing number of cases launched by citizens alleging that States have violated their human rights due to their failure to take sufficient action on climate change.<sup>178</sup> A few of these cases have been initiated by particular sections of the population, most notably youth and children, who have argued that the failure to act on climate change has discriminatory impacts as a result of the disproportionate ways in which these sections of the population will be affected.<sup>179</sup>

Three cases that have invoked arguments analogous to a claim founded on disability rights are *Juliana v. United States*,<sup>180</sup> *La Rose et al. v. Attorney General of Canada*,<sup>181</sup> and *Union of Swiss Senior Women for Climate Protection v. Swiss Federal Council*.<sup>182</sup> Although these lawsuits do not specifically refer to

175. See generally Margaretha Wewerinke-Singh, *Remedies for Human Rights Violations Caused by Climate Change*, 9 CLIMATE L. 224, 224–43 (2019) (exploring the potential of domestic courts as well as international bodies to provide redress for human rights violations caused by climate change; though it does not specifically refer to persons with disabilities, it is reasonable to presume that similar avenues can be used for violations of disability rights as well).

176. The CRPD itself suffers from a number of limitations that are typical of monitoring bodies established in international human rights law. First, only seventy-three states have ratified the Optional Protocol to the Convention and recognize the competence of the CRPD to receive and consider individual complaints. Second, there are many hurdles that must be overcome to bring a complaint to the CRPD, including the standard requirement that domestic remedies have been exhausted. Third, the CRPD lacks any real means of enforcement in the case of State noncompliance with its recommendations. There are a number of obstacles to pursuing State accountability under international human rights law for the human rights violations caused by climate change, particularly in relation to mitigation. These challenges include difficulties identifying duty bearers and rights holders in the context of global climate change; difficulties in applying international human rights obligations extraterritorially; and difficulties in establishing causation in relation to damage. ATAPUTTU, *supra* note 11, at 86, 89, 98. That said, attempts to hold States accountable for inadequate or unjust adaptation measures may face fewer such obstacles. *Id.* at 99.

177. See, e.g., Jacqueline Peel & Hari M Osofsky, *A Rights Turn in Climate Change Litigation?*, 7 TRANSNAT'L ENVTL. L. 37, 37 (2018) (discussing human rights based climate litigation around the world); Annalisa Savaresi & Juan Auz, *Climate Change Litigation and Human Rights Pushing the Boundaries*, 9 CLIMATE L. 244, 245–46 (2019) (discussing the use of human rights law concepts in climate change litigation).

178. Peel & Osofsky, *supra* note 177.

179. Oslo Tingrett [Oslo District Court] Jan. 4, 2018, 16-166674TVI-OTIR/06 (Norv.); *Environnement Jeunesse v. Attorney Gen. of Canada*, 2019 QCCS 2885 (Can.).

180. *Juliana v. United States*, 217 F. Supp. 3d 1224 (D. Or. 2016).

181. Statement of Claim to the Defendants, *La Rose v. Attorney Gen. Canada*, No. T-1750-19, 2019 F.C. (Can.).

182. Schweizerische Bundeskanzlei [Federal Council] Oct. 25, 2016, *Verein KlimaSeniorinnen Schweiz v Bundesrat*, 3 (Ger.). The *Swiss Senior Women* case was dismissed by the Department of Environment, Transport, Energy and Communications in 2017 on the basis that the plaintiffs were seeking global, general regulation of carbon dioxide emissions rather than seeking a remedy for the infringement

or invoke the rights of persons with disabilities, they argue that the underlying vulnerability of the plaintiffs to the health impacts caused by climate change has affected their health, quality of life, and well-being and that their respective governments have violated their human rights obligations due to their failure to adopt effective climate mitigation policies. In the *Juliana* and *La Rose* cases, several of the plaintiffs have conditions such as asthma, Lyme disease, and general anxiety disorder and allege that their health conditions have been affected and will worsen due to the impacts of climate change.<sup>183</sup> In the *Swiss Senior Women* case, the plaintiffs argue that they are vulnerable to the differential health impacts of heatwaves and excessive global warming for older women, including premature death, cardiovascular issues, dehydration, hyperthermia, exhaustion, fainting, heat cramps, and heat stroke.<sup>184</sup>

These three cases illustrate the sort of human rights argument that persons with disabilities could launch in response to a State's failure to take sufficient actions to mitigate climate change. Indeed, persons with disabilities could raise similar arguments, drawing attention to the differential impacts of climate change on their rights to life and health. As previously discussed, persons with disabilities that have preexisting illnesses and long-term chronic health conditions are more susceptible to the slow onset negative impacts of climate change.<sup>185</sup> For example, persons with neurological disorders (multiple sclerosis, schizophrenia, cerebral palsy, and spinal cord injuries) could argue that since they have limited resiliency to high temperatures and are especially vulnerable to long-term exposure to extreme heat,<sup>186</sup> their governments' failure to implement effective climate mitigation policies is a threat to their rights to life and health.

Furthermore, a disability rights approach obliges States to design climate policies and measures in a manner that considers the rights of persons with disabilities<sup>187</sup> and to ensure that these measures do not in themselves result in rights violations.<sup>188</sup> Nevertheless, an emerging literature in the field of disability

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of their specific legal rights. Similarly, under the ECHR, the request submitted by the senior women was considered *actio popularis* (action in the interest of public order), and therefore, inadmissible. Bundesverwaltungsgericht [BVGE] [Federal Administrative Court] Nov 27, 2018, No. A-2992/2017, 13 (Ger.). In 2018, the Swiss Federal Administrative Court also dismissed the case on similar grounds, stating that Swiss women aged seventy-five years or older are not the only population affected by climate change impacts, meaning that the injury and proposed remedies were not specific to the appellants. *Id.* at 27. The case is currently under appeal at the Swiss Supreme Court.

183. First Amended Complaint for Declaratory and Injunctive Relief 28, 46, 56, 75, *Juliana v. United States*, 217 F. Supp. 3d 1224 (D. Or. 2016) (No. 6:15-cv-01517-TC); *La Rose*, *supra* note 181, ¶¶ 104–211.

184. *Verein KlimaSeniorinnen Schweiz*, *supra* note 182, at 7, 48.

185. Odunola et al., *supra* note 86, 47–55.

186. Gaskin et al., *supra* note 54, at 810.

187. UNCRPD, *supra* note 23, art. 4(1)(c).

188. See Naomi Roht-Arriaza, "First, Do No Harm" *Human Rights and Efforts to Combat Climate Change*, 38 GA. J. INT'L & COMP. L. 593, 605–07 (2010) (noting that incorporating human rights into treaty-making would create a connection between climate change and human rights law).

studies suggests that persons with disabilities and their rights are often neglected in the design of environmental policies. In a recent review of sustainability-focused policies in the United Kingdom, Fenney Salkeld found that these policies reflected assumptions about able citizens capable of adopting environmentally friendly behaviors, giving little consideration to the accessibility challenges faced by persons with disabilities.<sup>189</sup> Other scholars have noted that concerns over accessibility have tended to be ignored in the design and construction of sustainable transit, houses, buildings, communities, and neighborhoods.<sup>190</sup>

One striking example of a type of climate mitigation policy that may be inconsistent with the rights of persons with disabilities can be found in the field of mass transit. While the development of transit systems is seen as key to reducing carbon emissions from automobiles,<sup>191</sup> they are often inaccessible to persons with physical mobility and visual impairments. A 2017 article in the *Guardian* analyzed wheelchair accessibility in major metro systems around the world and revealed that many systems did not fully account for the needs of persons with disabilities.<sup>192</sup> For example, only 50 out of 270 London tube stations, 9 out of 303 Paris metro stations, and 117 out of 472 New York subway stations were fully accessible (could be used independently by persons in wheelchairs).<sup>193</sup> While other cities were more successful, they were not perfect. Indeed, only 186 out of 211 Tokyo metro stations and 129 out of 156 Barcelona metro stations were fully accessible.<sup>194</sup> Similarly, another article reveals that as of March 2019, only 45 of 75 Toronto subways stations were wheelchair accessible.<sup>195</sup>

By ignoring the rights of people with disabilities when building public transportation, cities leave themselves open to being challenged in court. In fact,

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189. Salkeld, *supra* note 10.

190. See, e.g., Ann Heylighen, *Sustainable and Inclusive Design: A Matter of Knowledge?*, 13 *LOC. ENV'T*, 531, 531–32 (2008) (discussing how architects' lack of knowledge about inclusive design leads to inaccessible buildings); Imrie & Thomas, *supra* note 17, at 477–78 (discussing the lack of understanding of environmental barriers faced by persons with disabilities); Rachel Aldred & James Woodcock, *Transport: Challenging Disabling Environments*, 13 *LOC. ENV'T* 485, 486–87 (2008) (discussing the impact of car-centric transport on persons with disabilities); Chris Landorf et al., *The Urban Environment and Sustainable Ageing: Critical Issues and Assessment Indicators*, 13 *LOC. ENV'T* 497, 497–99 (2008) (describing the impacts that the urban environment has on older populations); Amita Bhakta & Jenny Pickerill, *Making Space for Disability in Eco-Homes and Eco-Communities*, 182 *GEOGRAPHICAL J.* 406, 408 (2015) (exploring how an eco-community accommodates persons with disabilities and discussing their shortcomings).

191. See Soo Chen Kwan & Jamal Hisham Hashim, *A Review on Co-Benefits of Mass Public Transportation in Climate Change Mitigation*, 22 *SUSTAINABLE CITIES & SOC'Y* 11, 11–12 (2016).

192. Nick Van Mead, *Access Denied: Wheelchair Metro Maps Versus Everyone Else's*, *THE GUARDIAN* (Sept. 21, 2017), <https://www.theguardian.com/cities/2017/sep/21/access-denied-disabled-metro-maps-versus-everyone-elses>.

193. *Id.*

194. *Id.*

195. Francine Kopun, *A Look at TTC Accessibility Through the Eyes of a Rider Who Uses Two Canes*, *THE STAR* (Mar. 10, 2019), [https://www.thestar.com/news/city\\_hall/2019/03/10/a-look-at-ttc-accessibility-through-the-eyes-of-a-rider-who-uses-two-canes.html](https://www.thestar.com/news/city_hall/2019/03/10/a-look-at-ttc-accessibility-through-the-eyes-of-a-rider-who-uses-two-canes.html).

there are several examples in which disability activists have sued governments over inaccessible public transportation. For example, in *Regroupement des activistes pour l'inclusion au Québec (RAPLIQ) c. Société de transport de Montréal (STM)*, a Quebec disability group instituted a class action lawsuit against the city of Montreal and two public transportation agencies over wheelchair accessibility in metro stations.<sup>196</sup> The plaintiffs argue that the current metro system in Montreal excludes persons with disabilities and violates the Quebec Charter of Human Rights and Freedoms and the Canadian Charter for Human Rights and Freedoms.<sup>197</sup> This class action lawsuit was authorized in May 2017 and the trial is ongoing.<sup>198</sup> In a similar case, *Bronx Independent Living Services v. Metropolitan Transit Authority (MTA)*, a disability rights group filed a class action lawsuit in which they challenged the MTA's failure to install an elevator while renovating the Middletown Road subway station in the Bronx, New York.<sup>199</sup> The court ultimately ruled that the MTA was obligated under the Americans with Disabilities Act (ADA) to improve accessibility through the renovations, no matter the cost.<sup>200</sup>

Beyond the legal challenges, the inaccessibility of climate mitigation policies, programs, and projects also undercuts their effectiveness and reinforces social inequities. Lack of access limits the share of the population that can contribute to the transition to a low-carbon economy by changing their behavior and proposing innovative ideas and practices.<sup>201</sup> Beyond merely preventing and minimizing the impacts of climate mitigation on persons with disabilities, States should ensure that their efforts to decarbonize their economies are carried out in ways that vindicate disability rights. For instance, the International Labour Organization has recommended that policies and programs that facilitate a transition to a low-carbon economy should ensure that green job opportunities, employment services, and skills development are accessible to persons with disabilities and address their underrepresentation in the workforce.<sup>202</sup>

### B. Disability Rights and Climate Adaptation

A disability rights approach also obliges States to adopt climate adaptation policies that can protect persons with disabilities from harm in climate-related emergencies and enhance their resilience to climate impacts. Again, this obligation can be understood as flowing from the general obligations included in

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196. Complaint at 2, *Regroupement des Activistes pour l'inclusion au Québec (RAPLIQ) v. Société de transport de Montréal (STM)*, No. 500-06-000739-157 (Cour Supérieur, Montréal, Can., 2017).

197. *Id.* at 6.

198. *Regroupement des Activistes pour l'inclusion au Québec (RAPLIQ) v. Société de transport de Montréal (STM)*, 2017 QCCS 2176 (Can.)

199. *Bronx Indep. Living Servs. v. Metro. N.Y.*, 358 F. Supp. 3d 324, 326 (S.D.N.Y. 2019).

200. *Id.* at 330–31.

201. Heylighen, *supra* note 190; Aldred & Woodcock, *supra* note 190; Landorf et al., *supra* note 190; Bhakta & Pickerill, *supra* note 190; Fenney Salkeld, *supra* note 10.

202. See *Persons with Disabilities in a Just Transition to a Low-Carbon Economy*, *supra* note 103.

the UNCRPD to respect, protect, and fulfil the rights of persons with disabilities in a context in which they are threatened by the impacts of climate change.<sup>203</sup>

Under Article 11 UNCRPD, States are specifically obligated to take measures to ensure the safety of people with disabilities in the event of a natural disaster.<sup>204</sup> An OHCHR thematic study on the rights of persons with disabilities under Article 11 sets out the human rights standards that States should respect in preparing for and responding to situations of risk and humanitarian emergencies.<sup>205</sup> These standards include the obligation of States to adopt or reform national emergency response plans and protocols in order to make them inclusive of, and accessible to, persons with disabilities, including through the inclusion of persons with disabilities in evacuation plans and by making budgetary allocations as required.<sup>206</sup> Moreover, States have an obligation to mainstream disability considerations into their humanitarian aid policies, including their migration and refugee policies.<sup>207</sup> States also have a duty to ensure that information related to emergencies is made available in formats accessible to persons with different types of impairments, and in the languages spoken in their territory.<sup>208</sup>

These standards are in line with the recommendations outlined in the Sendai Framework for Disaster Risk Reduction, a nonbinding international instrument adopted by States at the World Conference on Disaster Risk Reduction held in March 2015 and later endorsed by the UN General Assembly in June 2015.<sup>209</sup> Its guiding principles highlight the need to consider and include persons with disabilities in strategies that prevent and reduce vulnerability to disasters, enhance disaster preparedness, and foster resilience.<sup>210</sup> In its preamble, the Sendai Framework encourages a “people-centered” preventive approach to disaster risk reduction that empowers persons with disabilities and their organizations to assess risk, and to lead and promote disaster response, recovery, rehabilitation, and reconstruction policies.<sup>211</sup> In so doing, this framework

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203. *See supra* Part III.

204. UNCRPD, *supra* note 23, art. 11.

205. Thematic Study on the Rights of Persons with Disabilities Under Article 11 of the Convention on the Rights of Persons with Disabilities, on Situations of Risk and Humanitarian emergencies, U.N. Doc. A/HRC/31/30, at 3 (Nov. 30, 2015) [hereinafter Thematic Study].

206. *Id.*

207. *Id.*; *see also id.* ¶ 6 (concerning developing “systematic registration of internally displaced persons with disabilities” and the monitoring of their situation as well as of those in refugee camps, in order to ensure an adequate standard of living, as well as stating that the “administrative detention of persons with disabilities in migration and asylum-seeking contexts is not consistent with the Convention when it is applied without the provision of adequate support and reasonable accommodation”).

208. *Id.* at 4.

209. G.A. Res. 69/283, annex II, Sendai Framework for Disaster Risk Reduction 2015–2030 (June 23, 2015).

210. *Id.* art. 19.

211. *Id.* art. 7.

highlights important disability themes, such as universal design, inclusivity, and accessibility.<sup>212</sup>

The 2016 World Humanitarian Summit also explicitly addressed the inclusion of persons with disabilities in the humanitarian context. One of the key outcomes of the summit was the Charter on Inclusion of Persons with Disabilities in Humanitarian Action, which commits States to ensuring that humanitarian actions be inclusive of persons with disabilities through their greater participation in planning and implementing humanitarian programs and by ensuring the removal of barriers to accessible relief, protection, and support.<sup>213</sup> Other notable disability rights policy instruments applicable in the context of climate change include the 2007 Verona Charter on the Rescue of Persons with Disabilities in Case of Disasters,<sup>214</sup> the 2012 Incheon Strategy to “Make the Right Real” for Persons with Disabilities in Asia and the Pacific,<sup>215</sup> and the 2015 Dhaka Declaration on Disability and Disaster Risk Management.<sup>216</sup>

In the context of climate resilience, the 2011 Sphere Guidelines also identify disability as a cross-cutting issue in disaster risk reduction and humanitarian practices.<sup>217</sup> As such, when developing climate resilience programs, the guidelines recommend an intersectional approach that considers disability and its interactions with other vulnerabilities such as a gender, race, and age.<sup>218</sup> Ultimately, initiatives that seek to empower persons with disabilities and other vulnerable groups acknowledge the central role of these groups in representing their own vulnerabilities and needs and identifying possible solutions.<sup>219</sup> This involves active engagement of persons with disabilities and their representative organizations throughout the entire planning and implementation process, as well as coordination and collaboration with different actors in the disaster risk reduction and humanitarian fields. The twin-track approach is of particular relevance because it ensures both mainstream access to disaster risk reduction

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212. Laura M. Stough & Donghyun Kang, *The Sendai Framework for Disaster Risk Reduction and Persons with Disabilities*, 6 INT’L J. DISASTER RISK SCI. 140, 142 (2015).

213. CHARTER ON INCLUSION OF PERSONS WITH DISABILITIES IN HUMANITARIAN ACTION, WORLD HUMANITARIAN SUMMIT, (May 23–24, 2016), <http://humanitariandisabilitycharter.org/>.

214. *Verona Charter on the Rescue of Persons with Disabilities in the Case of Disasters* (Nov. 8–9, 2007), <https://harjupin.ee/wp-content/uploads/2009/03/VeronaCharter.pdf>.

215. U.N. Economic and Social Commission for Asia and the Pacific, *Incheon Strategy to “Make the Right Real” for Persons with Disabilities in Asia and the Pacific*, ST/ESCAP/2648 (2012).

216. U.N. Office for Disaster Risk Reduction, *Dhaka Declaration on Disability and Disaster Risk Management* (2015).

217. The Sphere Project was initially established by a group of humanitarian nongovernmental organizations and the International Red Cross and Red Crescent Movement aiming to improve the quality of disaster responses. The Sphere Project has established a set of minimum standards in key life-saving sectors, which described conditions that must be achieved in any humanitarian response in order for disaster-affected populations to survive and recover with dignity. These minimum standards are evidence based and represent sector-wide consensus on best practices in humanitarian responses. *The Sphere Project Humanitarian Charter and Minimum Standards in Humanitarian Response* (2011), <https://www.ifrc.org/PageFiles/95530/The-Sphere-Project-Handbook-20111.pdf>.

218. *Id.* at 11.

219. LEWIS & BALLARD, *supra* note 13, at 7.

and relief services, while also providing targeted interventions for persons with disabilities.<sup>220</sup>

There are existing disability-focused climate resilience initiatives that serve an array of purposes and integrate the aforementioned principles.<sup>221</sup> For example, there are projects that aim to integrate disability concerns into “mainstream” climate resilience activities. In India, the Emanuel Hospital Association worked with the Christian Blind Mission to develop inclusive disaster preparedness programs across eight states.<sup>222</sup> All activities considered the needs of persons with disabilities—for example, disability-inclusive preparedness plans were created with first-aid guides available in Braille.<sup>223</sup> Likewise, in Central Asia, the Save the Children education program has been working with government ministries to include school safety guidelines in national curricula, and training children in disaster response.<sup>224</sup> The trainings have been adapted to include children with disabilities.<sup>225</sup>

Other interventions are specifically targeted towards persons with disabilities.<sup>226</sup> Malteser International has developed early warning systems to ensure that persons with visual or hearing impairments can understand calls to action. It has also developed specific training for persons with disabilities and their families, such that they can be included in village disaster management plans.<sup>227</sup> Similarly, the Centre for Disability and Development in Bangladesh conducted an assessment that revealed that the persons with disabilities’ access

220. SMITH ET AL., *supra* note 13, at 37.

221. There are also foreign climate adaptation frameworks that recognize persons with disabilities in disaster planning. For example, the Philippine Disaster Risk Reduction and Management Act acknowledges that persons with disabilities are a vulnerable group and must be included in all climate resilience efforts. *See* Philippine Disaster Risk Reduction and Management Act, Rep. No. 10121, O.G. (May 27, 2010) (Phil.). Further, in Nepal, the Local Adaptation Plans of Action Manual identifies disability as a criterion for identifying climate vulnerable persons. *See* GOV’T OF NEPAL, MINISTRY OF SCIENCE TECHNOLOGY AND ENVIRONMENT, LOCAL ADAPTATION PLANS FOR ACTION 57 (2011). Finally, Thailand’s Climate Change Adaptation Master Plan contains inclusive disaster planning for persons with disabilities. GOV’T OF THAILAND, CLIMATE CHANGE MASTER PLAN (2015); UNDP Climate Change Adaptation, *Leaving No-One Behind: Including a Billion People to Adapt to Climate Change* (Dec. 10, 2018). In the same vein, some programs seek to raise awareness of the rights of persons with disabilities and the challenges they face. For instance, in the Philippines, one project trained persons with disabilities to present a weekly radio program in rural areas. This tool was effective in promoting key messages on disability rights and inclusive disaster risk management to the wider community. SMITH ET AL., *supra* note 13, at 37.

222. SMITH ET AL., *supra* note 13, at 36.

223. *Id.*

224. *Id.* at 37.

225. *Id.*

226. In addition to targeted interventions, there are complementary initiatives that encourage cross-stakeholder coordination and collaboration with disabled persons’ organizations. In Thailand, a campaign to create more inclusive disaster management exercises led the Royal Thai Armed Forces to invite the Council of Persons with Disabilities and various civil society organizations to join other government bodies and private sector actors in the Thailand-Cambodia Joint and Combined Exercise on Humanitarian Assistance and Disaster Relief. This resulted in greater engagement between actors and more inclusive practices. *Id.* at 40.

227. *Id.* at 30.

to safe drinking water is further hindered during emergencies. As a result, houses, tube wells, and latrines were reconstructed to enhance accessibility during disasters.<sup>228</sup> Some programs emphasize the need to ensure the participation of persons with disabilities in disaster risk reduction. For instance, in Indonesia, Arbeiter-Samariter-Bund developed a project to ensure the participation of out-of-school children with disabilities.<sup>229</sup> As many children with disabilities did not attend school and did not have access to the same information on preparedness, Arbeiter-Samariter-Bund used a “train a trainer” format to reach out.<sup>230</sup> They provided training to government officials at a subdistrict level, who then trained individuals at the village level, who subsequently provided information to out-of-school children with disabilities.<sup>231</sup>

Despite these positive examples, there is evidence that disability rights tend to be neglected in climate adaptation efforts. For example, an emerging literature shows that climate adaptation efforts in Bangladesh, Kenya, and Vanuatu have generally failed to consider the rights of persons with disabilities and develop policies to enhance their resilience to climate change.<sup>232</sup> Most of the evidence regarding the exclusion of persons with disabilities from adaptation efforts relates to the subfield of disaster risk reduction. A 2005 report published by the U.S. National Council on Disability stated that existing disaster preparedness and emergency response systems are still designed for people without disabilities, as the plans involve activities like walking, running, driving, seeing, and hearing.<sup>233</sup> Similarly, Pertiwi et al. reported that while disabled persons’ organizations have played an important role in enhancing the resilience of disabled persons to natural disasters and contributing to collective disaster risk reduction efforts in Indonesia, their efforts have been overlooked by policy makers.<sup>234</sup> More broadly, in the context of developing countries, Twigg, Kett, and Lovell point out that disability is not sufficiently integrated into disaster planning, with “every new disaster providing further examples of people with disabilities being overlooked or marginalized.”<sup>235</sup>

The monitoring carried out by the CRPD is increasingly highlighting these issues. In its concluding observations on the initial report submitted by the Seychelles, the CRPD criticized that country’s failure to include persons with disabilities and their perspectives in its laws, policies, and strategies relating to

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228. *Id.* at 39.

229. *Id.* at 37–38.

230. *Id.*

231. *Id.* at 37.

232. Kett & Cole, *supra* note 13, 33–41; UNESCO INCLUSIVE POLICY LAB, *supra* note 65, 21–24.

233. Janet E. Lord, *Disability-Inclusive Disaster Preparedness and Response Challenges and Opportunities for Reconstruction in Haiti*, 104 PROC. AM. SOC’Y INT’L L. ANNU. MTG. 118, 119 (2010).

234. Pradytia Pertiwi et al., *People with Disabilities as Key Actors in Community-Based Disaster Risk Reduction*, 34 DISABILITY & SOC’Y 1419, 1436–39 (2019).

235. TWIGG ET AL., *supra* note 13, at 3.

climate change and disaster risk readiness.<sup>236</sup> The committee thus recommended that the needs of all persons with disabilities be considered in the design and implementation of climate adaptation and disaster risk reduction measures.<sup>237</sup> Some State parties have also specifically reported on climate change considerations in their reports to the CRPD. For example, Tuvalu indicated in its initial report that its climate change policy “recognizes the inclusion of vulnerable populations,” and that climate change legislation under formulation in the country “also give[s] due consideration to vulnerable populations which also includes people with disabilities and people with special needs.”<sup>238</sup> Tuvalu also stated that disaster legislation and disaster planning under review will take vulnerable populations into consideration, including people with disabilities.<sup>239</sup> Similarly, Bangladesh, in its initial report to the CRPD, affirmed that “adaptation measures taken by the Government of Bangladesh and private sectors alike are being made inclusive of persons with disabilities.”<sup>240</sup>

This inclusion of disability rights into disaster response is necessary, as failure to do so is likely to give rise to litigation, as is reflected in *Brooklyn Center for Independence of the Disabled v. Bloomberg*.<sup>241</sup> In this class action lawsuit filed pursuant to the ADA, the plaintiffs alleged that the city of New York had not adequately addressed the needs of persons with disabilities when planning for and responding to emergencies and disasters.<sup>242</sup> In their arguments, the plaintiffs contended that the city’s emergency preparedness plans failed to accommodate their needs.<sup>243</sup> Ultimately, the court held that while the city had accommodated the needs of persons with disabilities in some respects, it failed to do so in others.<sup>244</sup> Most notably, the city’s evacuation plans did not adequately consider the needs of persons with disabilities; they failed to provide accessible shelters, as defined by the ADA; and they did not sufficiently communicate with persons with disabilities about the availability and location of accessible emergency services.<sup>245</sup> The court also stated that although there was no evidence of intentional discrimination against persons with disabilities, the ADA, the Rehabilitation Act, and the New York City Human Rights Law all seek to

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236. UNCRPD, Concluding Observations on the initial report of Seychelles, U.N. Doc. CRPD/C/SYC/CO/1, ¶¶ 12, 14, 16, 20 (2018).

237. *Id.* ¶¶ 21–22.

238. Initial report submitted by Tuvalu under article 35 of the Convention, due in 2016, U.N. Doc. CRPD/C/TUV/1, at 20 (2018).

239. *Id.*

240. Initial report submitted by Bangladesh under article 35 of the Convention, due in 2010, U.N. Doc. CRPD/C/BGD/1, at 15 (2017).

241. 980 F. Supp. 2d 588 (S.D.N.Y. 2013); *see also* *Cmtys. Actively Living Indep. & Free v. City of Los Angeles*, No. CV 09-0287 CBM (RZx), 2011 U.S. Dist. LEXIS 118364 (C.D. Cal. Feb. 10, 2011) (providing a similar case brought against the city of Los Angeles for its failure to consider disability rights in its emergency planning efforts).

242. *Brooklyn Ctr. for Indep. of the Disabled*, 980 F. Supp. 2d, at 596.

243. *Id.*

244. *Id.* at 597.

245. *Id.* at 597, 655–56, 658–59.

prevent both intentional discrimination and discrimination resulting from “benign neglect.”<sup>246</sup>

Following this judgment, a settlement was reached in which the city of New York agreed to implement comprehensive improvements to disaster planning, including the following: (i) hiring a Disability and Access and Functional Needs Coordinator to oversee the city’s emergency plans and ensure that they both meet the needs of persons with disabilities and comply with state and federal law; (ii) implementing a Disability Community Advisory Panel so that persons with disabilities can advise the city on its emergency planning; (iii) collaborating with the MTA, Taxi and Limousine Commission and New York City Housing Authority to develop accessible transportation plans for emergency situations; (iv) assembling a NYC/ADA High Rise Building Evacuation Task Force consisting of representatives from the city and disability organizations; (v) creating a Post-Emergency Canvassing Operation that will survey persons with disabilities to identify and to assess their critical needs and; (vi) establishing a minimum of sixty accessible emergency centers.<sup>247</sup>

This settlement provides a useful roadmap for designing disability-inclusive disaster readiness policies in other contexts. However, barriers to progress in designing disability-inclusive climate adaptation still remain, including the need for better data on disability in disaster contexts; the need for disaster organizations to focus on altering the environment to accommodate persons with disabilities, rather than simply helping individuals with impairments adjust to their situation; the need for “supportive attitudes, structures and systems” within the institutions and programs involved in disaster risk reduction; a lack of coordination and engagement with persons with disabilities, and a corresponding need for increased representation; and continuing societal discrimination, marginalization and exploitation against persons with disabilities.<sup>248</sup> Removing such barriers could better support the adaptive capacity of persons with disabilities to cope with extreme weather events.<sup>249</sup>

Ultimately, as the example of the *Brooklyn Center for Independence of the Disabled v. Bloomberg* shows, the full inclusion of disability rights in climate adaptation and disaster readiness policies requires a preexisting law that mandates their inclusion in government policy and provides persons with disabilities with access to justice in situations where their rights are not fully considered. Indeed, even in countries where disability rights legislation exists, persons with disabilities must still turn to the courts to ensure that their rights are protected in practice. For example, in the United States, the Federal Emergency Management Agency (FEMA) has worked to implement the ADA in its emergency operations, including through the creation of an Office of Disability

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246. *Id.* at 593.

247. Stipulation of Settlement and Proposed Remedial Order, *Brooklyn Ctr. for Indep. of the Disabled v. Bloomberg*, 980 F. Supp. 2d 588 (S.D.N.Y. 2013) (1:11-cv-06690).

248. TWIGG ET AL., *supra* note 13, at 4–6.

249. Lindsay & Yantzi, *supra* note 150, at 2199.

Integration and Coordination. That office was established following the enactment of the Post-Katrina Emergency Management Reform Act of 2006, with a mission to provide “federal, state, local, tribal and territorial governments as well as public sector and nonprofit organizations with the tools, methods and strategies necessary to ensure equal access and delivery of services to people with disabilities in all phases of emergency management.”<sup>250</sup> Its establishment was intended in part to address the significant shortcomings of FEMA’s disaster response with respect to persons with disabilities during Hurricane Katrina in 2005<sup>251</sup>—shortcomings that occurred despite the existence of the ADA and the considerable resources at FEMA’s disposal. The American experience suggests that an effective, disability rights-based approach to disaster response will be even more challenging to implement in countries with greater exposure to risk, limited adaptive resources, and less effective laws for the protection of disability rights.<sup>252</sup>

### C. Participatory Disability Rights and Climate Governance

Public participation is integral to effective and equitable climate governance as it ensures that climate solutions are designed and implemented in a manner that values the agency and knowledge of different segments of the population and can address their concerns and meet their needs.<sup>253</sup> This principle has been laid out in several international agreements. Under the UNFCCC, the concept of public participation encompasses access to information, the opportunity to participate in decision making, and effective access to judicial and administrative proceedings and remedies.<sup>254</sup> Article 6 of the UNFCCC delineates States’ responsibilities with respect to the promotion and facilitation of education and public awareness, public access to information, public participation, and training concerning climate change and its effects<sup>255</sup> and also established a series of work programs dedicated to the implementation of Article 6.<sup>256</sup> The preamble to the

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250. *Office of Disability Integration and Coordination*, FEMA (Apr. 22, 2019), <https://www.fema.gov/office-disability-integration-and-coordination>.

251. U.S. GOVERNMENT ACCOUNTABILITY OFFICE, FEDERAL DISASTER ASSISTANCE: FEMA’S PROGRESS IN AIDING INDIVIDUALS WITH DISABILITIES COULD BE FURTHER ENHANCED—REPORT TO CONGRESSIONAL REQUESTERS UNITED STATES GOVERNMENT ACCOUNTABILITY OFFICE 1-2 (2017).

252. *See generally* Kett & Cole, *supra* note 13 (an international literature review of climate change related challenges faced by disability advocates); UNESCO INCLUSIVE POLICY LAB, *supra* note 65, 21–24 (discussing challenges faced by persons with disabilities after the cyclone hit Vanatu).

253. *See* Sébastien Jodoin et al., *Public Participation and Climate Governance An Introduction*, 24 REV. EUR., COMP., & INT’L ENVTL. L. 117, 117–22 (2015).

254. *Id.* at 118.

255. U.N. Framework Convention on Climate Change art. 6, May 9, 1992, S. Treaty Doc No. 102-38, 1771 U.N.T.S. 107.

256. UNFCCC Dec. 11/CP.8, New Delhi Work Programme on Article 6 of the Convention, U.N. Doc. FCCC/CP/2002/7/Add.1 March 28, 2003); UNFCCC Dec. 9/CP.13, Amended New Delhi Work Programme on Article 6 of the Convention, U.N. Doc. FCCC/CP/2007/6/ Add.1 (March 14, 2008); UNFCCC Decision 15/CP.18, Doha Work Programme on Article 6 of the Convention, UN Doc. FCCC/CP/2012/8/Add.2 (Feb. 28, 2013).

Paris Agreement notably affirms “the importance of education, training, public awareness, public participation, public access to information and cooperation at all levels.”<sup>257</sup> Likewise, the Sendai Framework recommends an “all-of-society” approach to disaster risk reduction that requires “empowerment and inclusive, accessible and nondiscriminatory participation,” particularly for populations that are disproportionately affected by disasters.<sup>258</sup>

A disability rights approach specifically requires that States protect the participatory rights of persons with disabilities in the governance of climate actions. Indeed, the UNCRPD acknowledges that ensuring full participation by persons with disabilities will result in “significant advances in the human, social and economic development of society.”<sup>259</sup> Accordingly, “[f]ull and effective participation and inclusion in society” is enshrined as a general principle of the convention in Article 3.<sup>260</sup> To that end, Article 4 requires State parties to “consult with and actively involve persons with disabilities” when developing and implementing legislation and policies that concern them.<sup>261</sup> Subsequent articles articulate various civil, cultural, economic, and political rights that integrate participation and social inclusion,<sup>262</sup> including the right to participate in public affairs without discrimination.<sup>263</sup>

Despite international recognition of the value in engaging with persons with disabilities in policy making, inaccuracy and lack of data undermine inclusive planning and response efforts in many countries.<sup>264</sup> As a result, persons with disabilities are often left behind in preparedness and contingency planning or are treated as a single, homogenous group.<sup>265</sup> In reality, there is a great diversity of experience among vulnerable groups; people with disabilities face intersecting and compounding forms of discrimination that are based on age, gender, sexuality, race, religion, and impairment type.<sup>266</sup> The concept of intersectionality acknowledges that those belonging to multiple vulnerable groups are exposed to complex experiences of oppression that can lead to greater legal and social barriers.<sup>267</sup> An intersectional analysis of climate change, and responses thereto, is thus necessary, as it challenges “one-size-fits-all” blanket approaches, offers a

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257. Paris Agreement, *supra* note 4; *see also* UNFCCC Dec. 19/CP.20, The Lima Ministerial Declaration on Education and Awareness-Raising, U.N. Doc. FCCC/CP/2014/10/Add 3 (2015).

258. Sendai Framework, *supra* note 210, art. 19.

259. UNCRPD, *supra* note 23, preamble ¶ 13.

260. *Id.* art. 3.

261. *Id.* art. 4.

262. L. Moriarity & K. Dew, *The United Nations Convention on the Rights of Persons with Disabilities and Participation in Aotearoa New Zealand*, 26 *DISABILITY & SOC'Y* 683, 687 (2011).

263. UNCRPD, *supra* note 23, art. 29.

264. FRED SMITH ET AL., *DISABILITY AND DISASTERS: THE IMPORTANCE OF AN INCLUSIVE APPROACH TO VUNERABILITY AND SOCIAL CAPITAL* 5 (2012).

265. TWIGG ET AL., *supra* note 13, at 4.

266. CHAPLIN ET AL., *supra* note 61, at 6.

267. *Id.*

framework for integrating social heterogeneity, and provides context for understanding vulnerability and marginalization.<sup>268</sup>

At present, there is little evidence that States have effectively consulted persons with disabilities or considered their rights in the context of developing and implementing climate policies and programs. It is striking, for instance, that despite the clear obligations on States to consult persons with disabilities and promote their rights internationally under the UNCRPD, persons with disabilities do not currently have a constituency that enables them to participate in the multilateral climate negotiations, unlike women, children and youth, or Indigenous Peoples.<sup>269</sup> Moreover, a review of all of the references to disability in the decision making of the UNFCCC reveals that persons with disabilities have received scant attention from States and are only included in a list of vulnerable groups, as opposed to being the focus of specific initiatives to respect and fulfil their rights, such as those that have been created for other groups, such as the creation of the Indigenous Peoples Platform or the adoption of a Gender Action Plan.<sup>270</sup>

This is consistent with an emerging body of research that demonstrates that the disability experience is often neglected when constructing sustainable plans, policies, and programs, resulting in the failure to meet the needs of persons with disabilities.<sup>271</sup> Scholars have argued that the lack of knowledge about the disability experience and the exclusion of disabled individuals from environmental policy processes undermine the political citizenship of disabled persons.<sup>272</sup> This situation also results in inaccessible policies and programs that reinforce existing social, economic, and institutional inequities<sup>273</sup> and hinders the resilience and recovery of persons with disabilities.<sup>274</sup> In its thematic study on the rights of persons with disabilities in situations of risk and humanitarian emergency, the OHCHR highlights the importance of the participation of persons with disabilities in decision making in the design, implementation, evaluation,

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268. *Id.* at 3.

269. UNFCCC, *Admitted NGOs*, <https://unfccc.int/process-and-meetings/parties-non-party-stakeholders/non-party-stakeholders/admitted-ngos#eq-2> (last visited Dec. 12, 2019).

270. See Erika Lennon, *Rights in a Changing Climate Human Rights Under the UN Framework Convention on Climate Change*, CTR. FOR INT'L ENVTL. L. (2019), [https://www.ciel.org/wp-content/uploads/2019/12/Rights-in-a-Changing-Climate\\_SinglePage.pdf](https://www.ciel.org/wp-content/uploads/2019/12/Rights-in-a-Changing-Climate_SinglePage.pdf); Nathaniel Eisen et al., *The Rights of Persons with Disabilities in the Context of the UN Framework Convention on Climate Change*, CTR. FOR INT'L ENVTL. L. (2019), [https://www.ciel.org/wp-content/uploads/2019/12/Disability-Rights-in-Climate-Action\\_Dec-2019.pdf](https://www.ciel.org/wp-content/uploads/2019/12/Disability-Rights-in-Climate-Action_Dec-2019.pdf).

271. Lord, *supra* note 233, at 119.

272. See Andrew Charles & Huw Thomas, *Deafness and Disability—Forgotten Components of Environmental Justice Illustrated by the Case of Local Agenda 21 in South Wales*, 12 *LOC. ENV'T* 209, 214 (2007).

273. Deborah Ruth Fenney Salkeld, *Access to Sustainable Lifestyles: Disability and Environmental Citizenship 2–5* (Jan. 2015) (unpublished Ph.D. dissertation, University of Leeds), <http://etheses.whiterose.ac.uk/8835/1/Fenney%20Salkeld%202015%20access%20to%20sustainable%20lifestyles.pdf>.

274. J.A. Bourke et al., *Community Inclusion of Wheelchair Users During the Long-Term Recovery Phase Following the 2010/2011 Canterbury Earthquakes*, 23 *INT'L J. DISASTER RISK REDUCTION* 169, 175 (2017).

and review of policies in relation to humanitarian matters.<sup>275</sup> The thematic study emphasizes that “[t]he empowerment of persons with disabilities through, inter alia, awareness-raising, partnerships, capacity building and the adequate allocation of resources is vital to enable their meaningful participation and to prevent violations of their rights.”<sup>276</sup> Moreover, States must also “ensure close consultation with, and the active involvement of, organizations of persons with disabilities in the development, implementation, and monitoring of emergency-related legislation and policies.”<sup>277</sup> Integrating participation in climate resilience efforts will ensure that the specific needs of persons with disabilities will be met.<sup>278</sup>

Ultimately, the social participation of persons with disabilities is imperative to risk reduction, as it promotes information exchange and facilitates motivation for action. When individuals are able to participate in policy and planning processes, they are also more likely to engage in positive risk reduction behaviors, such as listening to the news and creating emergency plans.<sup>279</sup> Furthermore, the viability of sustainable climate resilience programs is highly dependent on participation of the groups involved.<sup>280</sup>

However, persons with disabilities cannot effectively participate in disaster risk reduction efforts unless they are given support in advance and throughout the process.<sup>281</sup> This support can be given in various ways. For example, it is necessary to empower persons with disabilities by informing them of their rights and their potential roles, especially since such groups face marginalization and stigmatization that may discourage participation.<sup>282</sup> Moreover, in order to facilitate engagement, States must also identify and address barriers to participation, as well as identify leaders amongst disability groups.<sup>283</sup> Allowing persons with disabilities to represent themselves tends to be more effective than representation by others, as they can speak from their own experience.<sup>284</sup> Indeed, self-representation is closely linked to individual autonomy and the freedom to make one’s own choices—principles that are accorded a central importance in the UNCRPD.<sup>285</sup>

Persons with disabilities must also be recognized as agents, makers, and doers in their own right, rather than simply as participants in processes led by

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275. Thematic Study, *supra* note 205, at 8.

276. *Id.*

277. *Id.*

278. PATRICK BOLTE, EMPOWERMENT AND PARTICIPATION: GOOD PRACTICES FROM SOUTH & SOUTH-EAST ASIA IN DISABILITY INCLUSIVE DISASTER RISK MANAGEMENT iv (2014).

279. Nopphol Witvorapong et al., *Social Participation and Disaster Risk Reduction Behaviors in Tsunami Prone Areas*, 10 PLoS ONE 1, 1 (2015).

280. RAJIB SHAW, COMMUNITY-BASED DISASTER RISK REDUCTION 4 (2012).

281. *Id.* at 6.

282. *Id.* at 33.

283. *Id.* at 34.

284. *Id.* at 36–37.

285. UNCRPD, *supra* note 23, art. 3.

people without disabilities. To this end, the emerging concept of “crip technoscience” offers important insights. Crip technoscience “challenges the presumption that valuable scientific knowing and technological change proceed from neutral, non-disabled bodyminds”<sup>286</sup> and views disabled people as “effective agents of world-building and dismantling toward more socially just relations.”<sup>287</sup> For instance, in the 1960s and 1970s, disability activists took direct action to create their own curb cuts in the sidewalks of American cities and pushed elected officials to pass laws to make these a mandatory feature of urban life.<sup>288</sup> Disabled persons continue to be at the forefront of creating, designing, and advocating for policies, practices, and technologies that enable them to overcome barriers, live autonomously and with dignity, and transform the spaces, cultures, and institutions that they interact with.<sup>289</sup> In turn, inclusive and universal design practices are also understood as having “resonant” impacts for the population as a whole.<sup>290</sup> In what has been called the “curb-cut phenomenon,” inclusive designs that address the challenges facing persons with disabilities can ultimately benefit the broader population. Inclusive, universal designs recognize the diversity and uniqueness of each individual user and, as such, appeal to a larger base.<sup>291</sup> Indeed, many innovations that are widely used today were initially created to support persons with disabilities, such as email and automatic doors.<sup>292</sup>

In the context of climate governance, such an approach foregrounds the agency of persons with disabilities as cocreators in reconfiguring the relationship between human societies and the changing climate. Given the knowledge, resources, and communities that persons with disabilities have developed for resilience in the face of natural disasters as well as the structural barriers that they must confront on a daily basis, their roles as knowers and makers should be especially valued in a future where life will likely be much more challenging due to the impacts of climate change.<sup>293</sup> That knowledge has the potential not only

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286. Aimi Hamraie & Kelly Fritsch, *Crip Technoscience*, TRANSMISSIONS (Sept. 20, 2017), <https://sites.library.queensu.ca/transmissions/crip-technoscience/>.

287. Aimi Hamraie & Kelly Fritsch, *Crip Technoscience Manifesto*, 5 CATALYST: FEMINISM, THEORY, TECHNOSCIENCE 1, 2 (2019).

288. AIMI HAMRAIE, BUILDING ACCESS. UNIVERSAL DESIGN AND THE POLITICS OF DISABILITY 95–100 (3rd ed., 2017).

289. Rob Imrie, *Universalism, Universal Design and Equitable Access to the Built Environment*, 34 DISABILITY & REHABILITATION 873, 873–882 (2012); Katie Ellis et al., *Disability’s Digital Frictions Activism, Technology, and Politics*, 188 FIBRECULTURE J. 7, 7–30 (2015); Charlotte Pearson & Filippo Trevisan, *Disability Activism in the New Media Ecology Campaigning Strategies in the Digital Era*, 30 DISABILITY & SOC’Y 924–40 (2015); HAMRAIE, *supra* note 288.

290. GRAHAM PULLIN, DESIGN MEETS DISABILITY 93 (MIT Press, 2009).

291. Jutta Treviranus, *Leveraging the Web as a Platform for Economic Inclusion*, 32 BEHAV. SCI. & L. 94, 94–96 (2014).

292. *Id.* at 95.

293. See Katherine Runswick-Cole & Dan Goodley, *Resilience: A Disability Studies and Community Psychology Approach*, 7 SOC. & PERSONALITY PSYCHOL. COMPASS 67, 67–78 (2013); Pertiwi et al., *supra* note 234, at 1421–22.

to improve the lives of people with disabilities, but also the lives of society at large.

*D. Extraterritorial Responsibility for Disability Rights in the Context of Climate Change*

Finally, a disability rights approach recognizes that the effects of climate change on the rights of persons with disabilities may also create extraterritorial obligations for States under international law. Generally speaking, the question of whether States are required to protect the human rights of those outside their own territory and be held liable for breaches of that protection is disputed.<sup>294</sup> Under international human rights law, States are only obliged to protect the human rights of individuals that are on their territory, under their jurisdiction, or over whom they exercise effective control. As a result, most scholars opine that it is unlikely that States bear responsibility for the human rights impacts of climate change experienced by individuals that do not fall within these grounds.<sup>295</sup> That said, Wewerinke-Singh argues that the scope of the human rights obligations of States with respect to climate change “must be assessed through a contextual analysis.”<sup>296</sup> She takes the view that certain obligations on the part of States, such as the obligation to take measures to prevent harm to human life, health, and cultures resulting from climate change, apply to individuals both within a State’s jurisdiction and extraterritorially.<sup>297</sup>

While it is unlikely that a court would recognize that States are liable for the impacts of climate change on the rights of persons with disabilities outside their territories, jurisdiction, or effective control, that does not mean that States do not have other duties relating to the extraterritorial implementation of these rights. Indeed, the UNCRPD specifically commits developed States to providing international funding, assistance, and cooperation for the fulfilment of disability rights in developing countries. Pursuant to Article 32, State parties are obliged to undertake a range of appropriate and effective measures in the domain of international cooperation, which could include:

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294. John H. Knox, *Human Rights Principles and Climate Change*, in THE OXFORD HANDBOOK OF INTERNATIONAL CLIMATE CHANGE LAW 213, 221 (Kevin R. Gray et al. eds., 2016).

295. ATAPATTU, *supra* note 11, at 89; Joanna Harrington, *Climate Change, Human Rights, and the Right to be Cold*, 18 FORDHAM ENVTL. L. REV. 513, 522–26 (2007).

296. MARGARETHA WEWERINKE-SINGH, *supra* note 174, at 39.

297. *Id.* at 130. The Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights support this conclusion, affirming that “[a]ll States have obligations to respect, protect and fulfil human rights, including civil, cultural, economic, political and social rights, both within their territories and extraterritorially.” ETO CONSORTIUM, MAASTRICHT PRINCIPLES ON EXTRATERRITORIAL OBLIGATIONS OF STATES IN THE AREA OF ECONOMIC, SOCIAL AND CULTURAL RIGHTS PRINCIPLE 3 (2013). It is important to note that the Maastricht Principles are a nonbinding instrument and do not establish new elements of human rights law, but rather clarify extraterritorial obligations of States on the basis of existing international law. *See also id.* at principles 4, 25(a)(d), 26, 37.

(a) Ensuring that international cooperation, including international development programs, is inclusive of and accessible to persons with disabilities; (b) Facilitating and supporting capacity-building, including through the exchange and sharing of information, experiences, training programs and best practices; (c) Facilitating cooperation in research and access to scientific and technical knowledge; (d) Providing, as appropriate, technical and economic assistance, including by facilitating access to and sharing of accessible and assistive technologies, and through the transfer of technologies.<sup>298</sup>

Such measures are of course consistent with well-established principles and practices associated with the climate regime,<sup>299</sup> as well as the International Covenant on Economic, Social and Cultural Rights.<sup>300</sup> As the Committee on Economic, Social, and Cultural Rights has stated, “in accordance with Articles 55 and 56 of the Charter of the United Nations, with well-established principles of international law, and with the provisions of the Covenant itself, international cooperation for development and thus for the realization of economic, social and cultural rights is an obligation of all States.”<sup>301</sup> They are also aligned with several of the SDGs—goals to which United Nations member States have committed in order to address the environmental, economic, and social dimensions of sustainable development under the UN global development agenda.<sup>302</sup> The goals emphasize capacity-building amongst vulnerable groups, including those with disabilities. In fact, persons with disabilities are referenced in several SDGs, particularly those related to access to inclusive and equitable education (Goal 4), economic growth and employment (Goal 8), access to human settlements (Goal 11), political inclusion (Goal 10), and collection of data that is disaggregated by disability (Goal 17).<sup>303</sup>

Finally, development assistance can also be used to protect the rights of persons with disabilities in the context of climate change. There has been a growing recognition in the international development community that persons with disabilities are amongst the poorest and most vulnerable groups and that more effective policies and programs are needed to address their needs.<sup>304</sup> Groce et al. suggest that addressing this “critical gap” in international development efforts requires not only the adoption and implementation of initiatives aimed specifically at persons with disabilities and the mainstreaming of disability

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298. UNCRPD, *supra* note 23, art. 32.

299. Lavanya Rajamani, *Differentiation in the Emerging Climate Regime*, 14 THEORETICAL INQUIRIES L. 151, 151–71 (2013).

300. ICESCR, *supra* note 107, arts. 2, 11, 15, 23.

301. CESCR, General Comment no. 3: The Nature of States Parties’ Obligations, U.N. Doc. E/1991/23, at 4 (1990).

302. Sustainable Development Goals and Disability, U.N. Dep’t of Econ. and Social Affairs (2018), <https://www.un.org/development/desa/disabilities/about-us/sustainable-development-goals-sdgs-and-disability.html>.

303. *Id.*

304. Nora Groce et al., *Disability and Poverty: The Need for a More Nuanced Understanding of Implications for Development Policy and Practice*, 32 THIRD WORLD Q. 1493, 1496 (2011).

considerations within all core development activities but also the development of global indicators to assess and monitor disability rights.<sup>305</sup> These considerations are equally applicable to the development of more inclusive multilateral and bilateral climate aid and finance provided to developing countries. By ensuring that climate-related technical and economic assistance, capacity building, and other forms of support prioritize the inclusion of persons with disabilities in terms of policies, processes, and measurable outcomes, climate assistance can better safeguard the rights of persons with disabilities in the context of climate breakdown.

#### IV. PURSUING SYNERGIES BETWEEN DISABILITY RIGHTS AND CLIMATE RESILIENCE

This Article has shown that a disability rights approach can be critically important to efforts to tackle the climate crisis. Such an approach enables policy makers, practitioners, and scholars to understand the differential impacts of climate change for persons with disabilities and enhances their ability to develop interventions to strengthen their resilience.

Disability rights also provide a set of internationally agreed upon principles, obligations, and standards to support and guide the adoption, design, and implementation of disability-inclusive climate policies and measures. At the international level, governments should therefore enumerate what they are doing to enhance the climate resilience of persons with disabilities in their periodic reports under the UNCRPD. They should also discuss these efforts in the communications that they submit to the UNFCCC on the implementation of their commitments under the Paris Agreement.<sup>306</sup> Most importantly, a disability rights approach should ensure that climate actions reinforce, rather than undermine, the participatory and substantive rights of persons with disabilities and emphasizes the need for persons with disabilities to have access to legal remedies when their rights are violated in the context of climate governance.

Of course, it is important to acknowledge the significant challenges that stand in the way of the full and effective consideration and implementation of disability rights in the context of climate change. Despite important progress in the recognition and advancement of disability rights, the estimated one billion people worldwide living with some form of disability today continue to experience significant levels of discrimination and oppression. Persons with disabilities face disparate access to education, employment, health care, justice, transportation, and basic goods and services.<sup>307</sup> They are subject to

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305. *Id.* at 1508.

306. Sébastien Duyck et al., *Human Rights and the Paris Agreement's Implementation Guidelines Opportunities to Develop a Rights-Based Approach*, 12 CARBON & CLIMATE L. REV. 191, 191–202 (2018).

307. Broderick, *supra* note 19. U.N. Dep't of Economic and Social Affairs, Disability and Development Report, 1, 2, 4, 16 (2018).

marginalization, abuse, and violence<sup>308</sup> and are generally prevented from participating in society on an equal basis, including in policy processes and civil society initiatives relating to the environment.<sup>309</sup> The challenges faced by persons with disabilities are moreover compounded by the multiple forms of additional discrimination that they may experience due to their ethnicity, age, gender, sexual identity, and socioeconomic status.<sup>310</sup> Barriers to inclusion are even greater in developing countries where basic services and resources are scarce and levels of stigmatization tend to be higher.<sup>311</sup>

These various challenges will only be more acute in a context where societies will struggle to adjust to climate impacts and will lack the time and resources to develop effective and equitable mitigation and adaptation measures. In line with a disability rights approach, we argue that the climate crisis should be seen as providing an opportunity for governments to identify and pursue synergies between efforts to combat climate change and those aimed at making them more accessible and inclusive for persons with disabilities. In addition to respecting, protecting, and fulfilling the rights of persons with disabilities, disability-inclusive climate solutions also have the potential to enable a greater share of the population to contribute to efforts to reach carbon neutrality and foster climate resilience.

Potential examples of climate measures that are more inclusive and more effective are not hard to find. In the context of climate mitigation, ensuring that mass transit systems are accessible is not only an obligation owed to persons with physical mobility impairments, but also benefits a wide range of users, including parents and caregivers with strollers and individuals carrying bicycles or other heavy items on buses or subways. Teleworking is another a tool that may serve disabled and nondisabled persons alike. While teleworking is beneficial for persons with disabilities in terms of enhancing their ability to join the workforce, it is also a good way for everyone to reduce their carbon footprint by limiting commuting.<sup>312</sup> With respect to climate adaptation, accessible early warning systems can benefit the broader population, as such systems can more effectively warn people with and without disabilities of impending danger.<sup>313</sup> Considering diverse dietary needs in shelters will accommodate individuals with diabetes as well as those who follow religious dietary rules.<sup>314</sup>

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308. *Id.* at 16.

309. *Id.* at 1, 13, 17.

310. Degener, *supra* note 18, at 7; Mannan et al., *supra* note 62, at 77; Peek & Stough, *supra* note 62, at 1261; CHAPLIN ET AL., *supra* note 61, at 6.

311. *Id.* at 8, 124, 144, 189, 289; Lang et al., *Implementing the United Nations Convention*, *supra* note 43; Groce et al., *supra* note 304.

312. Masahisa Nishina, *Applications of Teleworking Based on a Study of Disabled Workers*, 48 INDUS. HEALTH 292, 295 (2010); FRAN IRWING, GAINING THE AIR QUALITY AND CLIMATE BENEFIT FROM TELEWORK 6 (2004).

313. TWIGG ET AL., *supra* note 13, at 5.

314. Stough & Kang, *supra* note 212, at 144.

Another approach to pursuing synergies between disability rights and climate resilience can be found in the concept of “building back better.” This concept refers to “[t]he use of the recovery, rehabilitation and reconstruction phases after a disaster to increase the resilience of nations and communities through integrating disaster risk reduction measures into the restoration of physical infrastructure and societal systems, and into the revitalization of livelihoods, economies and the environment.”<sup>315</sup> The concept could be broadened to encompass the need to foster a more accessible and inclusive society for persons with disabilities in the aftermath of climate-related disasters. As a strategy, its success is also determined in part by steps taken to strengthen recovery capacity and decision making before the occurrence of a disaster,<sup>316</sup> reinforcing the importance of incorporating a disability rights approach at the earliest stages of adaptation planning.

In our view, the concept of “building back better” deserves to be more broadly applied to the context of climate change. As governments transform institutions, policies, and infrastructures to decarbonize their economies and enhance their climate resilience, they should do so in way that integrates persons with disabilities, fully considers and protects their rights, and fosters a more inclusive world.

#### CONCLUSION

During the past decade, the international community has increasingly acknowledged the human rights implications of climate change, including for persons with disabilities. Indeed, the UNHRC’s recent resolution calling on States to support the resilience and adaptive capacities of persons with disabilities in the context of climate change is the most explicit recognition of the importance of disability inclusion for combatting climate change.<sup>317</sup> Despite this, there is strikingly little attention given to disability issues in the governance of climate change.<sup>318</sup> In this Article, we draw on the human rights model of disability to explore the ways in which climate change differentially impacts persons with disabilities, how climate mitigation initiatives relate to and affect the rights of persons with disabilities, and how climate adaptation can be pursued in a way that enhances the resilience of persons with disabilities.

The international recognition of the human rights of persons with disabilities serves as an important starting point and as an impetus for States to design and implement climate actions in ways that respect, protect, and fulfill the human rights of disabled persons. As seen throughout this Article, the social

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315. U.N. Secretary-General, *Report of the open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction*, U.N. Doc. A/71/644, at 11 (Dec. 1, 2016).

316. U.N. Office for Disaster Risk Reduction, *Build Back Better in Recovery, Rehabilitation and Reconstruction* (2017).

317. H.R.C. Res. 41/21, *supra* note 7.

318. Wolbring, *supra* note 9.

vulnerability of persons with disabilities renders them especially susceptible to the human rights impacts of climate change. The human rights model of disability enables us to recognize the unique harms faced by persons with disabilities in the context of climate change and responses thereto, especially in relation to their rights to accessibility, to independent living and inclusion in the community, and to personal mobility.<sup>319</sup> In addition, a disability rights approach to climate governance highlights the principles, obligations, and standards that should guide governments in the design and adoption of climate mitigation and adaptation policies. Among other things, this requires States to actively engage with persons with disabilities to adopt intersectional perspectives that consider disability and its interactions with other vulnerabilities and recognize and protect substantive and procedural disability rights in the development, implementation, monitoring, and evaluation of climate policies and programs. Ensuring the inclusion of disabled persons in climate-related decision making that affects their rights is imperative given the knowledge and resources they have developed in confronting societal barriers to living. Moreover, it is vital that efforts to decarbonize economies and enhance climate resilience are pursued in ways that foster the dignity and autonomy of persons with disabilities and address, rather than reinforce, the barriers to their equal participation in society. Conversely, a failure to uphold disability rights in the context of climate governance could open the door for persons with disabilities to seek remedies under domestic and international human rights law.

Ultimately, we argue that a disability rights approach to climate mitigation can enable policy makers, practitioners, and scholars to understand the differential impacts of climate change for persons with disabilities and allow them to develop effective and equitable solutions to climate change. As such, the climate crisis should be seen as an opportunity for States to identify synergies between efforts to combat climate change and those aimed at realizing the rights of persons with disabilities. In addition to fulfilling the rights of persons with disabilities and fostering a more inclusive world, disability-inclusive climate solutions have resonant outcomes that can enable a greater share of the population to contribute to the emergence of carbon neutrality and enhance the climate resilience of society as whole.

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319. UNCRPD, *supra* note 23, arts. 9, 19–20, 26.