Disability, Human Rights, and Climate Justice

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ABSTRACT

The universally dire threat of climate change disproportionately affects marginalized populations, including the over one billion persons with disabilities worldwide. States that disregard the Paris Agreement, or exclude disabled persons from climate change mitigation and adaptation efforts, are violating agreed-upon human rights obligations. Notably, the rights contained in the UN Convention on the Rights of Persons with Disabilities, are threatened by climate change. To date, however, disability has largely been excluded from international climate change negotiations as well as national-level discharge of climate-related measures. By contrast, a disability human rights approach views disabled persons as disproportionately experiencing environmental threats and unnatural disasters due to their exclusion from state laws, policies, and services available to their non-disabled peers. Additionally, a disability human rights approach mandates the removal of exclusionary barriers and the implementation of positive measures to ensure the equitable treatment of individuals with disabilities. Achieving disability-inclusive climate justice requires “participatory justice”—empowering persons with disabilities to ascertain climate mitigation and adaptation approaches that are efficacious for, successfully implementable by, and accountable to disabled people. Disability-inclusive climate justice solutions are in synergy with universal climate justice goals and benefit entire societies, not “only” those with disabilities.
I. INTRODUCTION

Anthropogenic climate change was acknowledged by the Paris Agreement within the United Nations Framework Convention on Climate Change (UNFCCC) to be “an urgent and potentially irreversible threat to human societies.” The impact of climate change, while universal, disproportionately affects members of marginalized populations, including the over one billion persons with disabilities worldwide. The continuing onset of climate change affects disabled persons by increasing food and water insecurity, negatively impacting health, reducing access to healthcare services and livelihoods, decreasing accessible infrastructure, and increasing migration. The developing world is at especially heightened risk, creating dire circumstances for the estimated eight hundred million disabled persons living in the Global South. Climate change is increasingly precipitating extreme weather emergencies in which persons with disabilities experience higher mortality rates, greater risk of injury, and may even face abandonment. Many disabled persons are already experiencing these impacts in a variety of situations, from more intense wildfires in the United States to stronger tropical cyclones on Small Island Developing States.

States that do not comply with the Paris Agreement, or exclude persons with disabilities from climate change mitigation and adaptation efforts, are violating agreed-upon human rights obligations. Notably, the United Nations Convention on the Rights of Persons with Disabilities (CRPD) has been
ratified by nearly every United Nations (UN) member state.\(^9\) Many of these rights, if not all, are threatened by climate change.\(^{10}\) Pursuant to the CRPD, states parties must ensure that individuals with disabilities are an “integral part of relevant strategies of sustainable development.”\(^11\) Article 11 makes this duty clear in the context of climate change by requiring states to take “all necessary measures to ensure the protection and safety of persons with disabilities in situations of risk,” including during “humanitarian emergencies and the occurrence of natural disasters.”\(^12\) Moreover, the CRPD’s General Obligations article mandates that states parties “take into account the protection and promotion of the human rights of persons with disabilities in all policies and programmes,” and when doing so “closely consult with and actively involve persons with disabilities, including children with disabilities, through their representative organizations.”\(^13\)

Under a disability human rights approach, persons with disabilities are viewed as disproportionately experiencing environmental threats and unnatural disasters due to their exclusion from state laws, policies, and services available to their non-disabled peers. Such discrimination prevents disabled persons from enjoying the fulfilment of their human rights and their ability to flourish. Additionally, a disability human rights approach mandates both that exclusionary barriers be removed and that positive measures be implemented to ensure the equality of those with disabilities.\(^{14}\) Overcoming these barriers requires “participatory justice,” meaning participation by persons with disabilities and their representative organizations (Disabled Peoples’ Organizations, referred to as DPOs) in policy development, priority setting, decision making, and implementation activities.\(^{15}\) To date, however, disabled persons have been largely excluded from international climate

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11. CRPD, supra note 8, pmbl. (g).

12. Id. art. 11.

13. Id. art. 4(1)(c); 4(3).


change negotiations as well as national-level discharge of climate-related measures. Relatedly, environmentally focused nongovernmental organizations (NGOs) often do not target the inclusion of persons with disabilities in their programming or partner with DPOs.

Climate justice recognizes the nexus of climate change, human rights, and development; acknowledges that the impacts of climate change are not distributed equally; and seeks to address these inequities through climate mitigation and adaptation approaches. Achieving disability-inclusive climate justice requires empowering persons with disabilities and DPOs to ascertain climate mitigation and adaptation approaches that are efficacious for, successfully implementable by, and accountable to disabled people. Empowering persons with disabilities to advocate for their needs and equally participate in the development of schemes responsive to those requisites facilitates the creation of more diverse and flexible climate mitigation and adaptation strategies. Disability-inclusive climate justice solutions are in synergy with universal climate justice goals and benefit entire societies, not “only” those with disabilities.

Worldwide, and in response to the CRPD, there is impetus toward the inclusion of disabled persons in international development, as demonstrated in national-level policies and UN agency programming.16 Notably, the 2015 Sustainable Development Goals (SDGs) specifically reference disability seven times and individuals in vulnerable situations six times.17 Each of the SDGs are applicable to persons with disabilities in order to “Leave No One Behind,” including SDG 13 which requires states to “[t]ake urgent action to combat climate change and its impacts.”18 To be sustainable entails addressing the inequalities experienced by persons with disabilities by fully implementing inclusive climate change mitigation and adaptation efforts, and by building climate resilient and accessible infrastructure. A compelling foundation for DPO advocacy for future full implementation and partnerships with disaster risk reduction actors is contained in the high-level commitments of the Sendai Framework for Disaster Risk Reduction, 2015–2030 (Sendai Framework),19

Combatting climate change requires the rapid metamorphosis of societies worldwide and the development of climate resilience during global decarbonization. The resulting sustainable societies should be disability-inclusive. The CRPD provides a framework for this reformation, along with lessons that have been learned from its implementation. Among these, best practices from the post-CRPD evolution of inclusive development offer pertinent and applicable guidance for triggering disability-inclusive approaches to climate mitigation and adaptation. Notably clear—and yet glaringly absent from the discourse—is the fact that global climate change cannot be successfully addressed without the participation of one billion persons with disabilities. Thus it is imperative to employ and leverage innovative solutions created by DPOs and their allies to enhance climate resilience and protect everyone’s human rights.

By way of background, Part I describes how persons with disabilities are disproportionately affected by climate change. Next, Part II sets forth the legal commitments of states for achieving climate justice on behalf of the global disability population. Part III then prescribes a framework for attaining disability-inclusive climate justice.

II. DISABILITY AND CLIMATE CHANGE

States have floundered in their attempts to meet Paris Agreement commitments; consequently, global carbon dioxide emissions continue to rise. Worldwide average temperatures have risen by more than 1.2°C compared to preindustrial levels, with the five warmest years occurring since 2015. The immediate and significant impacts of this warming have included Antarctic ice sheet loss, shrinking glaciers, sea level rise, and droughts, as well as sudden onset hazards that include floods, wildfires, and hurricanes. Risk of wildfire rose in 58 percent of 196 countries when comparing data from 2001–2004 to that of 2016–2019. Worldwide, the land surface area experiencing an excess number of months in drought in 2018 was more

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24. Watts et al., supra note 22, at 137.
than double that of the historical baseline of 1950–2005. Globally, climate change threatens to worsen water availability, heighten hunger and poverty, and degrade infrastructure. This exacerbates existing social inequalities and disproportionately affects persons with disabilities.

Globally, the number of “natural” disasters tripled during 2000–2009, as compared to 1980–1989, and each disaster disproportionately threatens the human rights of persons with disabilities. Strikingly, individuals with disabilities experiencing natural disasters have up to a four times higher mortality rate, a higher risk of injury, and might even be abandoned. Without accessible warnings, transportation, and emergency shelters, some persons with disabilities cannot escape these emergencies—a 2013 global survey found that only 20.6 percent of disabled people could immediately evacuate in response to a sudden extreme weather event.

Even within emergency shelters, individuals with disabilities are at greater risk of violence, particularly when they are women and children. Individuals with disabilities are also asymmetrically affected by disasters because they may lose possession of assistive devices and medication, or be separated from families and established support systems. Moreover, due to discrimination and inaccessibility, they face challenges obtaining basic necessities such as water, food, and healthcare services. In the aftermath of disaster, and especially following the destruction of infrastructure and

25. Id. at 138.
26. Id. at 129, 141, 145.
34. Id. at 9.
social support systems, persons with disabilities face additional accessibility barriers including those related to participating in education and work.\textsuperscript{35} Indeed, the United Nations Human Rights Council (HRC) has recognized that disability human rights “are disproportionately affected by the negative impacts of climate change.”\textsuperscript{36} Climate change has a devastating impact on people with disabilities, threatening their human rights to life, water, food, health, housing, accessibility, personal mobility, education, work, participation in cultural life, living independently, and liberty of movement.\textsuperscript{37} Further, climate change magnifies existing inequalities. Likewise, the Intergovernmental Panel on Climate Change predicts that the world’s economically, socially, and institutionally marginalized people will be negatively differentially affected by global warming, including those with disabilities.\textsuperscript{38} Globally, disabled persons disproportionately experience exclusion from healthcare, education, and employment, and consequently fall below the international poverty line.\textsuperscript{39} In the most inequitable nations, disability poverty prevalence is twice that of nondisabled comparators.\textsuperscript{40}

Climate change will unduly threaten people with disabilities’ right to water, food, and sanitation. Disabled people make up a significant proportion of those without access to clean water.\textsuperscript{41} For example, 96.6 percent of persons with disabilities and the elders faced challenges obtaining clean water in a 2011–2012 survey in Ethiopia.\textsuperscript{42} Barriers to clean water and sanitation include stigma (such as the belief that people with disabilities could contaminate the latrine or water), the physical inaccessibility of water pumps and sanitation buildings, and the burden of transporting water.\textsuperscript{43} The 2018 UN World Water Development Report estimates that by 2050, 5.7 billion people will face water stress, potentially exacerbating this dire

\begin{thebibliography}{99}
\bibitem{35} Laura M. Stough & Ilan Kelman, \textit{People with Disabilities and Disasters, in Handbook of Disaster Research, Handbooks of Sociology and Social Research} 225 (H. Rodríguez et al. eds., 2d ed, 2018).
\bibitem{38} IPCC, \textit{supra} note 27, at 802.
\bibitem{39} \textit{World Report on Disability, supra} note 2, at 10.
\bibitem{40} DESA, \textit{supra} note 16, at 2.
\bibitem{42} \textit{Id.}
\end{thebibliography}
circumstance. Barriers to food security include livelihood limitations, physical access, and restrictive access to food due to the perceived lack of social worth of persons with disabilities. Climate hazards reduce crop yields and increase food insecurity. Individuals with disabilities and their households, already experiencing exclusion from alternative livelihoods and increased direct and indirect costs, face challenges to adapt.

Climate change will likewise disproportionately negatively impact the right to health of persons with disabilities. The Lancet and University College London Commission found that “climate change is the biggest global health threat of the 21st century.” Global health is threatened by climate change due to a lack of clean air, water, food security, heat stress, infectious diseases, and injury caused by extreme weather. People with disabilities’ health is presently impacted by climate change, and this situation is predicted to be exacerbated in the future. The right to health of disabled persons is asymmetrically impacted due to social, physical, and institutional barriers which prevent their access to health care services. Social determinants of health, including poverty and race, also negatively affect their health because of the iterative impact of intersectional discrimination. Moreover, extreme weather can disrupt the access of the disabled to medication, devices requiring electricity, and healthcare services.

45. DESA, supra note 16, at 39.
48. IPCC, supra note 27, at 27, at 54.
50. C. Gaskin et al., *Factors Associated with the Climate Change Vulnerability and the Adaptive Capacity of People with Disability: A Systematic Review 9 WEATHER CLIM. SOC. 801, 801 (2017).*
52. See IPCC, supra note 27, at 6, 50.
53. Id. at 59, 547.
55. Laura M. Stough et al., *Barriers to the Long-Term Recovery of Individuals with Disabilities Following a Disaster*, 40 DISASTERS 387, 397, 405 (2016).
will also destructively impact the health of individuals with particular disabilities. Heatwaves, for instance, harm the health of persons with mental health conditions, respiratory challenges, and neurological conditions that affect thermoregulation (such as spinal cord injuries). The consequences of heatwaves are worsened by health inequalities and social marginalization.

Climate migration is an adaptation preference for many people experiencing disasters, degraded environments, and the socioeconomic consequences of climate change. In 2017, for instance, 18 million people from 135 countries were displaced by extreme weather. By 2050 it is estimated that 200 million people may migrate due to climate change. Mobility as an adaptive option is inhibited for people with disabilities by poverty, lack of social support, and assistive devices, as well as accessible information, transportation, and housing. Furthermore, disabled persons, and particularly women, are at greater risk of violence and discrimination as they seek humanitarian assistance, healthcare services, and livelihoods. People with disabilities in Bangladesh, for example, who lacked the resources for planned migration were reportedly “stuck” facing food insecurity, degraded environments, and disaster. The majority of persons migrate internally, such as people with disabilities in Kiribati, a Pacific Island presently facing sea level rise such that residents “have to move their homes every two or three years.” Persons with disabilities that migrate across borders face discriminatory immigration policies inhibiting international labor migration as a potential adaptive strategy. Immigration policy often views disability through a medical model and denies international mobility based on “health,” instead of viewing people with disabilities as having the capacity to contribute to society.

66. Id. at 1477.
Viewed through a disability human rights model, the heightened impact of climate change on disability is caused by the manifold buttressing of cultural, social, economic, and structural forms of discrimination. Persons with disabilities confront barriers of social stigma, poverty, lack of accessibility, and exclusion from education and employment as they seek to adapt to climate change or utilize climate-related programs. They also are inhibited from participating as change agents in climate mitigation and adaptation efforts. DPO capacity is reduced by excluding individuals with disabilities from education and training, as well as failing to provide accessible information, all of which limit their awareness of climate change or disaster preparedness. Institutional structural discrimination and the lack of access of persons with disabilities to policy makers causes national climate policies to be developed without consultation with DPOs or alignment with disability human rights. Several international institutions, including the Intergovernmental Panel on Climate Change, have therefore identified people with disabilities as highly “vulnerable” to the negative impacts of climate change. Strikingly, this heightened vulnerability can often be due to avoidable discrimination that prevents the full participation of persons with disabilities in society, rather than as an inexorable result of disability.

Many persons with disabilities experience manifold intersecting forms of discrimination, including women, children, racial minorities, elders, and indigenous people. Thus, the HRC has recognized “the adverse impacts of climate change on individuals with multiple vulnerability factors.” Women with disabilities, for instance, face further impediments to climate adaptation due to gender marginalization that assigns cultural characteristics of

74. Res. 41/21, supra note 36, at 2.
passivity and dependence, discouraging awareness that they can participate in meetings by voicing their lived experiences and needs.\textsuperscript{75} Hence, climate resilience responses need to consider the diversity of the disability community and the myriad types of discrimination they encounter.\textsuperscript{76}

The disproportionate impact of climate change on people with disabilities is a compelling argument for why there should be a retrenchment toward effective and transformative disability-inclusive climate mitigation and adaptation approaches. Hence, states parties to the CRPD and Sendai Framework must ensure the participation of persons with disabilities in the design and implementation of disaster risk reduction policies and practices. Nevertheless, academic treatments indicate that disaster risk reduction measures often elide persons with disabilities.\textsuperscript{77} This is because, in practice and in diverse geographical regions, persons with disabilities reportedly have not been actively engaged in the development of disaster reduction plans. States lack processes for the engagement of disabled people in policy development; likewise there is a insufficient disability-inclusive implementation, investment, and monitoring.\textsuperscript{78}

The CRPD and the Paris Agreement require the participation of persons with disabilities in the creation of climate adaptation and mitigation measures. Individuals with disabilities and DPOs should be stakeholders in the design, development, and implementation of these plans and policies. To date, disability is inadequately treated in climate adaptation measures and neglected from climate mitigation measures; when discharged, these schemes have not yet included persons with disabilities in meaningful ways that can engender equality and social transformation. Present evidence suggests with regards to policy making in Kenya, for instance, that people with disabilities have not been involved in climate-related policy discussions or decision making, and that climate adaptation has fallen short of providing disability-inclusive policies to protect their human rights and ensure their climate resilience.\textsuperscript{79} Notably, there is a dearth of disability disaggregated data, participatory research, or academic inquiry on the effect of a wider scope of climate resilience approaches on persons with disabilities, their families, and communities.\textsuperscript{77, 78}

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\item \textsuperscript{75} See Alexandra Gartrell et al., Disaster Experiences of Women with Disabilities: Barriers and Opportunities for Disability Inclusive Disaster Risk Reduction in Cambodia, 64 Global Envtl. Change, 102134 (2020).
\item \textsuperscript{76} See Smith et al., supra note 69, at 7.
\item \textsuperscript{77} See generally David Abbott & Sue Porter, Environmental Hazard and Disabled People: From Vulnerable to Expert to Interconnected, 28 Disability & Soc’y 839 (2013).
\item \textsuperscript{78} See Twigg et al., supra note 29, at 3; see also Pradytia Pertiwi, Gwynyth Llewellyn & Michelle Villeneuve, Disability Representation in Indonesian Disaster Risk Reduction Regulatory Frameworks, 45 Int’l J. Disaster Risk Reduc. 101454 (2020); DeeDee Bennett, Five Years Later: Assessing the Implementation of the Four Priorities of the Sendai Framework for Inclusion of People with Disabilities, 11 Int’l J. Disaster Risk Sci. 155 (2020).
\item \textsuperscript{79} See Kett & Cole, supra note 69, at 12–13.
\end{itemize}
and communities. Hence, future research on the effect of climate change adaptation and mitigation measures, as well as that of targeted disability-inclusive approaches, on the lived experience of persons with disabilities is crucially needed in order to precipitate best practices for achieving disability climate justice.80

In 2015, two transformative agreements—the Paris Agreement and the SDGs—were adopted. Both were aimed at enabling a global transition to a climate-secure, sustainable, and equitable future.81 Climate justice requires climate action that is inclusive of persons with disabilities and enables that community to bring their perspectives, leadership, and problem-solving abilities as climate change agents. Individuals with disabilities must plan alternative strategies and end-arounds to overcome hurdles and create unique solutions to navigate their everyday lives. As climate actors they bring a unique perspective to solving the problems faced in building climate resilience.82 Consequently, there is a need for greater opportunities and processes for collaboration between disabled persons, DPOs, and other climate resilience actors. The nexus of disability human rights and climate change creates a dual and reinforcing benefit for states whereby ensuring basic human rights for persons with disabilities increases their climate resilience.

III. LEGAL MANDATES FOR DISABILITY INCLUSION

States have legal commitments and obligations for achieving climate justice on behalf of the worldwide population of one billion persons with disabilities. These are briefly set forth below.

A. The CRPD

The CRPD, adopted on 13 December 2006, is the first UN human rights treaty specifically pertaining to persons with disabilities.83 The instrument illuminates how other predecessor human rights obligations are applicable to, as well as legally enforceable by and on behalf of, persons with disabilities.84 It achieves this goal by incorporating economic, social, and cultural

82. See Abbott & Porter, supra note 77, at 846.
83. See CRPD, supra note 8.
84. See generally The UN Convention on the Rights of Persons with Disabilities: A Commentary (Ilias Bantekas, Michael Ashley Stein, & Dimitris Anastasiou eds., 2018).
rights with civil and political rights in a holistic fashion.\textsuperscript{85} Notably, the CRPD treaty negotiations were the first to actively involve participation by the targeted stakeholders, invoking a participatory dynamic.\textsuperscript{86} Persons with disabilities from around the world, with diverse intersectional identities, were represented in DPOs, as well as state delegations, and had speaking rights in Ad Hoc Committee sessions.\textsuperscript{87} Consequently, DPOs and states both have an ownership stake in the treaty and its implementation, a fact borne out by the CRPD’s provisions.\textsuperscript{88} To date, 182 of the 193 UN member states have ratified or acceded to the CRPD,\textsuperscript{89} which was operationalized on 3 May 2008.\textsuperscript{90}

Patently, and as delineated in Part I, disability human rights have been and continue to be threatened by the negative effects of climate change. Accordingly, the CRPD obligates states to take action on the immediate consequences of climate change, and also to guard against future harms, as part of a mandate to both promote and protect human rights. This obligation links tightly to a number of the treaty’s provisions. Broadly, the equal rights of persons with disabilities and their entitlement to human rights protection is reaffirmed in the Preamble;\textsuperscript{91} the Purpose article contains a general directive “to promote, protect, and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities;”\textsuperscript{92} and the General Principles article declares that states must not discriminate against persons with disabilities.\textsuperscript{93} The General Obligations article, moreover, requires that states “take into account the protection and promotion of the human rights of persons with disabilities in all policies and programmes” and mandates participatory justice by requiring states parties to “closely consult with and actively involve persons with disabilities, including children with disabilities, through their representative organizations.”\textsuperscript{94}

Two articles are more explicit regarding climate mitigation and adaptation laws and policies to protect and fulfil the human rights of persons with

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\item \textsuperscript{85} See Stein & Stein, Beyond Disability Civil Rights, supra note 14, at 1205–06.
\item \textsuperscript{86} See Stein & Lord, Participatory Justice, supra note 15, at 167, 174–78.
\item \textsuperscript{87} See generally Paul Harpur & Michael Ashley Stein, The UN Convention on the Rights of Persons with Disabilities and the Global South, 47 YALE J. INT’L L. (forthcoming 2022).
\item \textsuperscript{88} CRPD, supra note 8, art. 4 (3) (requiring States to actively consult with civil society when reviewing national programing); Id. at art. 33 (3) (requiring civil society participation in national level monitoring efforts). See also Committee on the Rights of Persons with Disabilities, General Comment No. 7 (Participation), 20th Sess. adopted 21 Sept. 2018, U.N. Doc. CRPD/C/GC/7, https://undocs.org/en/CRPD/C/GC/7 (underscoring the right of persons with disabilities to participate in all aspects of State programing).
\item \textsuperscript{89} The United Nations Treaty Collection maintains an up-to-date listing. United Nations, United Nations Treaty Collection, https://perma.cc/F4Z5-QFFE.
\item \textsuperscript{90} See id.
\item \textsuperscript{91} CRPD, supra note 8, pmbl.
\item \textsuperscript{92} Id. art. 1.
\item \textsuperscript{93} Id. art. 3.
\item \textsuperscript{94} Id. arts. 4(1)(c); 4(3).
\end{itemize}
disabilities against the negative impacts of sudden and slow onset climate change within their jurisdictions. Article 11 requires states to take “all necessary measures to ensure the protection and safety of persons with disabilities in situations of risk,” circumstances that explicitly include “humanitarian emergencies and the occurrence of natural disasters.” The Preamble further mandates that states ensure that disabled persons are an “integral part of relevant strategies of sustainable development.” Other articles interrelate to climate change protections, including the right to health, an adequate standard of living, and access to clean water. Collectively, these provisions oblige states to actively ameliorate current climate-caused harms and also anticipate and protect against climate-related threats that impact the human rights of their disabled populations.

In addition, when acting extraterritorially via bilateral or multilateral cooperation, including development schemes, Article 32 obligates states parties to ensure that the programs are “inclusive of and accessible to persons with disabilities.” This directive, the first to appear in a UN human rights treaty, requires “facilitating and supporting capacity-building,” research and scientific cooperation, and sharing “technical and economic assistance.” In consequence, developed countries engaged in international programs relating to climate change should build the climate mitigation and adaptation capacity of developing countries, including Small Island Developing States, and share knowledge, technology, and finance in a manner that empowers those states’ disabled populations.

When implementing the CRPD by reviewing periodic state reports and issuing Concluding Observations (COs), the Committee on the Rights of Persons with Disabilities (CRPD Committee) has infrequently but pointedly referenced climate change. The CRPD Committee has recommended in COs to Guatemala and Honduras that those states begin “mainstreaming disability in its climate change policies and programmes.” Similarly, the

95. Id. art. 11.
96. Id. pmbl. (g).
97. Id. art. 25.
98. Id. art. 28.
99. Id. art. 28(2) (a).
100. Id. art. 32(1) (a).
101. Id. art. 32(1) (b)-(d).
102. The same may be said for non-state development agents. See Stein & Stein, Disability, Development, and Human Rights, supra note 67, at 1245–48.
103. CRPD, supra note 8, arts. 35–36.
104. Id. art. 34.
105. A normative transformation is evident with explicit references to “climate change” appearing in relation to Article 11 after 2015, the same year in which three transformative international agreements were adopted: the Paris Agreement, the SDGs, and the Sendai Framework.
CRPD Committee’s CO for Panama recommended that the state “[i]ncorporate a disability perspective in its policies and programmes on climate change.”107 In relation to Bolivia and Colombia, the CRPD Committee suggested “the inclusion of persons with disabilities in strategies for climate change adaptation and disaster risk reduction.”108 With regards to the Seychelles, the CO called for close consultation with “organizations of persons with disabilities to ensure that the requirements of persons with disabilities are included in the design and implementation of all disaster risk reduction and management plans and climate change adaptation.”109 The CO for Australia acknowledged that “the effects of climate change contribute to exacerbating inequality and vulnerability among persons with disabilities” and recommended “that the State party, in close consultation with representative organizations of persons with disabilities, establish a fully accessible and inclusive mechanism to engage with persons with disabilities in the implementation and monitoring of the Sendai Framework.”110

More directly and systemically, the CRPD Committee recognized in a joint statement with four additional treaty monitoring bodies that

State parties have obligations, including extra-territorial obligations, to respect, protect and fulfil all human rights of all peoples. Failure to take measures to prevent foreseeable human rights harm caused by climate change, or to regulate activities contributing to such harm, could constitute a violation of States’ human rights obligations.111

The five Committees additionally stated that “[w]hen reducing emissions and adapting to climate impacts, States must seek to address all forms of discrimination and inequality, including . . . [discrimination toward] persons with disabilities.”112 The CRPD may thus be interpreted as obligating states to

reduce carbon emissions and adopt climate resilience policies that prevent disability human rights violations.

States that do not implement disability-inclusive climate mitigation and adaptation approaches are therefore violating agreed-upon international human rights obligations. People with disabilities, DPOs, and their allies should seek effective remedies for violations of the CRPD. Within the disability rights provenance, the CRPD Committee can examine alleged individual and collective violations of the treaty brought against states that have ratified the CRPD’s Optional Protocol.113 Moreover, although infrequently conducted, the CRPD Committee can inquire into “grave or systematic violations by a State Party” of CRPD-related rights.114

The CRPD thus acts as a key framework for achieving disability-inclusive climate justice. A disability human rights approach to climate justice is based on the principles of full and effective participation, equality of opportunity, nondiscrimination, accessibility, gender equality, and respect for children with disabilities of present and future generations.115 Ensuring a disability human rights approach enables persons with disabilities to act as change agents and critical allies in the movement for climate justice. Pursuant to the CRPD, “States parties shall closely consult with and actively involve persons with disabilities, including children with disabilities, through their representative organizations.”116

B. The Paris Agreement

The Paris Agreement entered into force in November 2016 and has been ratified by 193 countries.117 The United States deposited its instrument of acceptance in September 2016, withdrew in November 2020, and re-entered in February 2021.118 The Preamble states that “[p]arties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights,” including specifically the related

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114. Id. art. 6.
115. CRPD, supra note 8, art. 3.
116. Id. art. 4 (3).
rights of “persons with disabilities.” Although this is the lone reference to persons with disabilities within the document, the acknowledgement obligates states to address the effect of climate on persons with disabilities because they are among the vulnerable populations disproportionately affected by climate change. It likewise binds states to act on behalf of disabled persons by referencing existing human rights obligations, among which is the CRPD.

Unfortunately, the Paris Agreement did not explicitly enshrine disability human rights in international climate law in greater prescriptive detail. Nevertheless, obligations to the world’s one billion member disability community are implicit in the document through omnibus provisions. Thus, the Preamble’s affirmation of the importance of “public participation, public access to information and cooperation at all levels on the matters addressed in this Agreement” apply equally to persons with disabilities. So, too, does Article 12’s obligation that states parties enhance “public participation and public access to information, recognizing the importance of these steps with respect to enhancing actions under this Agreement.” A disability human rights approach requires the appropriate representation and participation of persons with disabilities in climate negotiations comprehensively, from the international to the local level.

Yet, to date, persons with disabilities and their organizations face attitudinal, institutional, and accessibility barriers to their participation in international climate negotiations. Despite DPO advocacy efforts there currently is no acknowledged disability constituency. Consequently, in contrast to indigenous people, women, gender, and youth NGOs, who are represented by constituencies, DPOs cannot fully participate, for instance, they cannot offer interventions at plenary sessions.

Moreover, recognition of persons with disabilities by UNFCCC decisions is too often relegated to their status among vulnerable groups, a catalogue

119. Paris Agreement, supra note 1, pmbl.
120. Id.
121. Id. art. 12.
which is neither homogeneous nor univocal. Only participation by persons with disabilities in international climate negotiations, representation in state delegations, and consultation at the domestic level will appropriately represent policy making, programs, and technologies that address the institutional, social, and economic barriers they face. Indeed, a 2015 Paris Agreement decision on the terms of reference for reviewing the Doha work program on Article 6 reaffirmed “the importance of taking into account gender aspects and the need to promote the effective engagement of children, youth, the elderly, women, persons with disabilities.” Other decisions reference persons with disabilities in relation to capacity building, adaptation, loss and damage, and climate empowerment, but when doing so include them amongst a cluster of other named groups as vulnerable populations.

In contrast, the UNFCCC has adopted decisions to catalyze balanced gender representation, notably decision 36/CP.7 aimed at improving the representation of women in decision making; the 2014 Lima Work Programme on Gender to advance gender responsive climate policy and enhance gender balance, including reporting by the Secretariat; and the Enhanced Lima Work Programme on Gender and its Gender Action Plan to increase gender representation and responsiveness. Yet parallel monitoring of the participation of persons with disabilities and DPOs and the development of a disability responsive action plan remains absent. Consequently, there is insufficient political pressure on states or NGOs to ensure the participation of disabled people in decision making, and thereby enable the development of transformative disability-responsive approaches.

C. The MDGs and SDGs

International development frameworks provide another mechanism by which to attain disability inclusive climate resilience. Previously, the Millennium Development Goals (MDGs) adopted by the United Nations General Assembly from 2000–2015 did not include persons with disabilities, despite the salience of persons with disabilities to achievement of each of those Goals. To illustrate: the MDGs’ overarching intention was to halve global poverty. At the time, persons with disabilities were thought to constitute 20 percent of those living under the poverty line, yet no mention of the group was included in the Goals, targets, or indicators related to poverty eradication. Accordingly, the MDGs were designed to eliminate poverty while discriminating against the world’s largest minority, and the poorest of the poor. Following on their participation in the CRPD negotiations, DPOs—prominently, the International Disability and Development Consortium—lobbied for inclusion in the international development agenda leading to normative transformation and international recognition. A global consultation in 2013 between the UN Department of Economic and Social Affairs (UN DESA), UNICEF, DPOs and people with disabilities from eighty-eight countries resulted in a report on barriers to disability-inclusive policies and programming. Additionally, in 2013, the General Assembly held a high-level meeting with the theme “The Way Forward, a Disability-Inclusive Development Agenda towards 2015 and beyond,” and later released a document promoting disability-inclusive development. Moreover, UN General Assembly Resolution 67/140 encouraged “the mobilization of resources on a sustainable basis to mainstream disability in development at all levels.” Lobbying by DPOs ultimately resulted in persons with disabilities being included in the SDGs.

133. This was noted by both then-World Bank President James Wolfensohn and Nobel prize winning economist Amartya Sen. See Amartya Sen & James D. Wolfensohn, Helping Disabled People Come out of the Shadows, Gulf News (2 Dec. 2004), https://perma.cc/7VXD-F4TL. See also U.N. Dept of Economic and Social Affairs, The Millennium Development Goals (MDGs) and Disability, https://perma.cc/G4H8-EMM5.
The 2030 Agenda for Sustainable Development, and prominently within it the SDGs, is an internationally agreed upon framework by which states, international institutions, and communities work together to achieve sustainable human societies. The SDGs were adopted in 2015, and consciously guided by the CRPD acknowledge disability as a crosscutting issue to be taken into account during implementation of all seventeen SDGs—including SDG Goal 13 which requires states to “[t]ake urgent action to combat climate change and its impacts." Persons with disabilities are specifically referenced seven times, and persons in vulnerable situations are mentioned six times. These Goals focus on education, adequate sanitation, employment, reducing inequality, accessible cities and settlements, ending poverty and hunger and strengthening global partnerships.

Climate change threatens the accomplishment of most of the SDGs because addressing climate change is the only pathway toward sustainable development. The SDGs offer a roadmap toward an equitable climate-safe world and aspire to “Leave no one Behind.” Consequently, there is recognition that the SDGs and the Paris Agreement need to function synergistically with the planning, programming, and monitoring of each aligned goal, and that partnerships must be built between groups that have not previously collaborated. Addressing climate change and achieving the SDGs is viewed as challenging but attainable; however, to do so, “we must act now.” A joint UN DESA and UNFCCC conference adamantly concluded that a “bottom-up inclusive approach” which engaged with vulnerable people would foment policy development and implementation that most reflected the co-benefits of the SDGs and climate action.

Five years after the adoption of the SDGs, and despite progress, people with disabilities continue to face disproportionate poverty and lack access to healthcare, education, employment, and political life. Overcoming this implementation gap requires targeting and mainstreaming disability in development schemes along with transformational change in education, employment, humanitarian assistance, and information and communication technology; the robust use of disability indicators and monitoring; and disability-inclusive climate action. Achieving sustainable development requires states to realize disability-inclusive climate justice by addressing inequalities experienced by

139. See generally SDGs, supra note 17.
140. Id. Goal 13.
142. See id. Goals 1.3, 1.4, 1.5, 2.1, 6.2, 11.5.
143. Id. pmbl.; see also SARA RENNER ET AL., U.N. DEP’T OF ECON. & SOC. AFFS. & U.N. DEV. PROGRAMME, WHAT DOES IT MEAN TO LEAVE NO ONE BEHIND? 3 (2018), https://perma.cc/HYG7-ZGCD.
144. Zhenmin & Espinosa, supra note 81, at 494–95.
146. See generally Stein & Stein, The New Disability-Inclusive Development Agenda, supra note 68.
persons with disabilities and fully implementing inclusive climate change mitigation efforts and adaptation, including disaster risk reduction, while building climate resilient accessible infrastructure. People with disabilities and their organizations can have a transformative role by focusing the power of DPO advocacy on disability-inclusive climate action.

D. The Sendai Framework

The Sendai Framework\textsuperscript{147} requires “all-of-society engagement”\textsuperscript{148} to attain worldwide disaster risk reduction targets. Under this scheme, persons with disabilities and DPOs for the first time are viewed as “critical in the assessment of disaster risk and in designing and implementing plans.”\textsuperscript{149} The Sendai Framework recognizes that recovery provides an opportunity to “Build Back Better”\textsuperscript{150} and empowers people with disabilities to lead and promote “universally accessible response, recovery, rehabilitation[,] and reconstruction approaches.”\textsuperscript{151} Moreover, the dissemination of disaggregated disability data is required.\textsuperscript{152} To align with Sendai Framework principles, states should recognize individuals with disabilities and DPOs as active contributors to disaster risk planning and implementation and leaders of inclusive disaster risk reduction.\textsuperscript{153}

E. Additional Soft Laws/Resolutions

Following the World Humanitarian Summit, the 2016 Charter on Inclusion of Persons with Disabilities in Humanitarian Action\textsuperscript{154} demonstrated international commitment to disability-related inclusion. However, despite the acknowledged legal commitments, there has been limited awareness on how to implement these global commitments within the humanitarian sector. In 2019, the UN Inter-Agency Standing Committee released humanitarian guidelines designed with people with disabilities to promote inclusive humanitarian assistance.\textsuperscript{155} These guidelines position persons with disabilities as essential humanitarian actors.

In July 2019, the HRC adopted a resolution urging states to consider disability human rights when addressing climate change.\textsuperscript{156} This resolution

\begin{itemize}
  \item \textsuperscript{147} Sendai Framework, \textit{supra} note 19.
  \item \textsuperscript{148} \textit{Id. ¶ 19(d)}.
  \item \textsuperscript{149} \textit{Id. ¶ 36(a)(iii)}.
  \item \textsuperscript{150} \textit{Id. ¶ 6, 19(k), 20, 32}.
  \item \textsuperscript{151} \textit{Id. ¶ 32}.
  \item \textsuperscript{152} \textit{Id. ¶ 19(g)}.
  \item \textsuperscript{153} See Twigg et al. \textit{supra} note 29, at 1, 6.
  \item \textsuperscript{154} See generally Humanitarian Charter, \textit{supra} note 20.
  \item \textsuperscript{155} See generally IASC, \textit{supra} note 21.
  \item \textsuperscript{156} See Res. 41/21, \textit{supra} note 36, at 5.
\end{itemize}
notes “international human rights instruments provide roles for states and other duty bearers, including businesses, to promote, protect and respect, as would be appropriate, human rights, including those of persons with disabilities, when taking action to address the adverse effects of climate change.” 157 Moreover, it acknowledged the “adverse impacts of climate change on individuals with multiple vulnerability factors, including women and girls with disabilities.” 158 Importantly, the HRC resolution recognizes disabled persons as being disproportionately affected by climate change, and also the “need for ensuring meaningful participation, inclusion and leadership of persons with disabilities and their organizations within disaster risk management and climate-related decision making.” 159 As part of the resolution, the HRC requested that the UN Office of the High Commissioner of Human Rights produce “an analytical study on the promotion and the protection of the rights of persons with disabilities in the context of climate change” and hold a panel discussion at the HRC’s forty-fourth session. 160 Markedly, it noted that “States also have legal obligations, including under international human rights law, to implement disability-inclusive climate policies that empower persons with disabilities by ensuring their full and effective participation in climate action at all levels.” 161

IV. A DISABILITY-INCLUSIVE CLIMATE JUSTICE FRAMEWORK

Disability human rights provides a framework of principles and obligations for operationalizing a disability-inclusive climate justice approach. Central to achieving this shift is the notion of participatory justice which mandates the active participation by persons with disabilities and DPOs in decision making, priority-setting, policy development, and implementation. 162 Participatory justice in accordance with the CRPD’s text and principles ensures the full and active participation of civil society, 163 as well as the Sendai Framework’s goal of transforming society to “Build Back Better” 164 through an “all-of-society engagement” 165 approach. Similarly, the Paris Agreement obligates states to address the effect of climate on persons with disabilities and affirms the importance of “public participation.” 166

157. Id. at 4.
158. Id. at 2.
159. Id. at 3.
160. Id. at 5.
161. Res.44/30, supra note 3, at 8.
163. CRPD, supra note 8, pmbl., art. 3; General Comment No. 7, supra note 88.
164. Sendai Framework, supra note 19, ¶ 32 (Priority 4).
165. Id. Guiding Principles 19(d).
166. Paris Agreement, supra note 1, pmbl.
Unfortunately, people with disabilities are currently marginalized within the UNFCCC. Persons with disabilities should participate as members of state delegations and have an authorized DPO constituency admitted to the international climate negotiation process. The achievement of these goals would be aided by a Disability Action Plan similar to the Gender Action Plan that would provide for a disability focal point, request reports, promulgate indicators that could monitor the level of disability participation, and develop the DPO capacity of secretariat staff and constituted bodies. Such a plan would raise awareness of disability issues broadly within the UNFCCC and, through consultation with DPOs, foment national-level discourses on increasing disability-inclusive climate resilience. Disability human rights obligations would then be considered when designing and implementing domestic climate responses, and disability-inclusive climate action would be reported. This accountability would counter prevailing Nationally Determined Contributions, National Adaptation Plans, and National Communications which often do not adequately and effectively address disability. Climate actors with disabilities can provide a unique perspective to identifying and solving the problems in building climate resilience for their community and the whole of society.

CRPD state periodic reports should include disability-inclusive climate action and efforts to prevent climate change from disproportionately affecting persons with disabilities. Notably, the island nation of Kiribati has reported “collecting baseline information disaggregated by disability, providing health information relevant to people with disabilities, increasing the capacity of services and personnel relevant to disability issues; and developing disaster plans with people with disabilities.” Concurrently, civil society shadow reporting that highlights climate mitigation and adaptation approaches discriminating against persons with disabilities could increase national awareness and pressure states to adopt or increase inclusive climate action policies in response to the imminent threat posed.

Climate change activists with disabilities are utilizing a widening array of human rights-based legal strategies that could be further emulated by the global disability rights community. In a landmark case, in September 2019, sixteen young people, including Greta Thunberg (who happens to have a

167. Non-governmental Organization Constituencies, supra note 124 see also Jodoin et al., supra note 125, at 108.
168. See U.N. Framework Convention on Climate Change, supra note 130.
169. See Maria Hasan, Policy Brief: Persons with Disabilities in a Just Transition to a Low Carbon Economy, International Labour Organization 10 (2019); Jodoin et al., supra note 125, at 113.
170. Id. at 113.
disability) filed a petition under the Convention on the Rights of the Child (CRC).\footnote{See CRC, supra note 112. (The third optional protocol of the CRC allows children to submit complaints.); Petition Submitted under Article 5 of the Third Optional Protocol to the United Nations Convention on the Rights of the Child, Sacchi et al. v. Argentina, et al. (23 Sept. 2019), http://perma.cc/Z893-Q4CS [hereinafter CRC Communication].} It asserted that five state parties to the CRC—Argentina, Brazil, France, Germany, and Turkey—violated their human rights to life, health, and indigenous rights to culture due to their failure to mitigate climate change.\footnote{Id. Although the petition was brought collectively against five states, the CRC Committee issued individual decisions for each of the respective five states. Committee on the Rights of the Child, CRC/C/88/D/104/2019 (8 Oct. 2021) (Argentina) [hereinafter CRC Argentina]; Committee on the Rights of the Child, CRC/C/88/D/106/2019 (8 Oct. 2021) (Brazil); Committee on the Rights of the Child, CRC/C/88/D/107/2019 (8 Oct. 2021) (France); Committee on the Rights of the Child, CRC/C/88/D/108/2019 (8 Oct. 2021) (Germany); Committee on the Rights of the Child, CRC/C/88/D/109/2019 (8 Oct. 2021) (Turkey).} The Committee on the Rights of the Child (CRC Committee) found in October 2021 that states had “effective control over the sources of emissions that contribute to the causing of reasonably foreseeable harm to children outside its territory”\footnote{CRC Argentina, supra note 173, ¶ 10.12.} and thus had extraterritorial as well as domestic responsibilities for carbon emissions. Moreover, in the CRC Committee’s view, the children had established prima facie “that they have personally experienced a real and significant harm in order to justify their victim status.”\footnote{Id. ¶ 10.14.} Unfortunately for the children, their petition was inadmissible due to a failure to exhaust local remedies.\footnote{Saachi v. Argentina, Sacchi, et al. v. Argentina, et al., Comm. Nos. 104/2019 (Argentina), 106/2019 (France), 107/2019 (Germany), 108/2019 (Turkey) (2019).} However, an open letter in plain text to the children made clear that future complaints can be brought by children without access to justice to the CRC Committee under the Optional Protocol on Communication.\footnote{Office of the High Commissioner for Human Rights, Open Letter, https://www.ohchr.org/EN/HRBodies/CRC/Open_letter_on_climate_change.pdf&action=default&DefaultItemOpen=1} The petition garnered substantial attention, precipitated public, political, and legal dialogue on climate change, and illustrated the efficacy of utilizing international human rights instruments in climate justice advocacy. Further, the underlying legal strategy is being emulated by other public interest organizations.\footnote{See, e.g., Agostinho et al. v. Portugal et al. (2020), https://perma.cc/88F6-2QMM. (A case was lodged at the European Court of Human Rights against thirty-three member states on the ground of human rights violations arising from climate change.)

Also in October 2021, the same month that the CRC Committee published its decisions, five young Australians, aged 14–24, claiming their rights as persons with disabilities and as Indigenous People submitted a complaint collectively to the UN Special Rapporteurs on human rights and the environment, the rights of persons with disabilities, and the rights of
Indigenous people. The complaint asserts that Australia’s Second Nationally Determined Contribution “is grossly inadequate to limit warming to 1.5°C” and seeks redress and comment from the Australian government including how Australian inaction is “consistent with its human rights obligations to . . . disabled people.”\(^ {179}\) Persons with disabilities whose human rights are violated by climate change, and who have exhausted all domestic administrative remedies, can bring similar communications to the CRPD Committee alleging violations of the CRPD against states parties that have ratified the CRPD’s Optional Protocol.\(^ {180}\)

Moreover, the European Court of Human Rights (ECtHR) has the opportunity to consider the unprecedented disability human rights violations arising from climate change. A petitioner with Uhthoff’s Syndrome (temperature dependent Multiple Sclerosis) filed a case in March 2021, pursuant to the European Convention on Human Rights (ECHR), alleging that the Austrian government allowed risks to his right to life and violated his right to family and private life, by failing to set effective measures to decrease greenhouse gas emissions.\(^ {181}\) Persons with disabilities whose human rights have been violated by climate change, who have exhausted all domestic administrative remedies, can bring similar complaints against member states to the ECtHR.

Developing DPO capacity on human rights and climate resilience is central to a “bottom up” disability human rights approach. Individuals with disabilities facing discrimination in education and employment require accessible information on human rights and the environment. The Paris Agreement’s Preamble declares the importance of “public access to information,”\(^ {182}\) and Article 12 obligates states parties to enhance such access.\(^ {183}\) Unfortunately, institutions such as the UNFCCC and the Intergovernmental Panel on Climate Change do not provide all documents online in accessible formats.\(^ {184}\) Thus, persons with visual, auditory, print, or intellectual disabilities who require accessible websites, documents in accessible formats, subtitled videos, maneuverable presentations, and plain language text, cannot gain sufficient knowledge for claiming their rights. Following guidelines by the Worldwide Web Consortium can readily enable website accessibility, whether for states, international institutions, or non-state actors, and thereby lessen


\(^ {180}\) For an up-to-date list of states that have ratified the Optional Protocol, currently 100, see https://perma.cc/L9GM-RW36.


\(^ {182}\) See Paris Agreement, supra note 1, pmbl.

\(^ {183}\) Id. art.12.

\(^ {184}\) See, e.g., Documents and Decisions, UNFCCC, https://perma.cc/Y9TJ-YJ6B.
this digital divide.\textsuperscript{185} Indeed, ensuring access to information for people with disabilities can increase website usability for all. Moreover, allowing access to large documents in multiple formats and chapters can facilitate access in developing countries with slower and intermittent access to the internet, and dissemination via social media by advocates. Finally, many academic studies relating to climate change elide disability, despite the disproportionate effect of climate change on this group, further restricting access to information.

Positively, there is increased impetus toward the inclusion of persons with disabilities in global development. International development initiatives are legally obligated by the CRPD and the SDGs to be disability-inclusive.\textsuperscript{186} Climate and development funding operationalized through multinational and bilateral development provides an opportunity to “Build Back Better,”\textsuperscript{187} thereby increasing simultaneously inclusive climate resilience, universal design, knowledge, and technical assistance. The World Bank committed to begin utilizing universal design in post-disaster reconstruction from 2020, and in urban rail projects by 2025.\textsuperscript{188} Persons with disabilities should be targeted and mainstreamed in climate resilience development initiatives with inclusive decision making, disability indicators, and monitoring to ensure accountability.

A “bottom up” human rights approach requires building local DPO capacity in human rights and climate resilience to overcome discriminatory attitudes in local communities so that persons with disabilities are empowered to contribute to the community as climate actors and decision makers. Human rights education empowers people with disabilities to develop self-worth and claim their rights.\textsuperscript{189} Community attitudinal change is necessary so that the contributions of disabled people are valued and they are viewed as “worth saving.”\textsuperscript{190} International human rights actors can build DPO capacity and facilitate collaboration between DPOs and state allies, such as law and policy makers, to foment policy development and bridge policy implementation gaps.\textsuperscript{191} National initiatives to induce cultural attitude change are vital to overcome stigma; for instance, radio programming allows both urban and rural communities to be reached at low cost in developing countries.


\textsuperscript{187.} Sendai Framework, supra note 19, ¶ 32 (Priority 4).


\textsuperscript{190.} Cf. Abbott & Porter, supra note 77, at 843–44.

\textsuperscript{191.} For illustrative examples, see Harvard Law School Project on Disability, https://hpod.law.harvard.edu; Stein & Lord, \textit{Forging Effective International Agreements}, supra note 15.
States have too often neglected disability-inclusive approaches to climate resilience in policy making and implementation. States must ensure the participation of persons with disabilities and DPOs as stakeholders in the creation of climate adaptation and mitigation measures. People with disabilities are best positioned to develop strategies and remove barriers based on their lived experience, situating themselves as change agents rather than as part of a voiceless “vulnerable” population. Their meaningful inclusion can facilitate processes to remove attitudinal, institutional, and accessibility barriers, prevent future harms, and enhance climate resilience. To illustrate, in Australia, persons with disabilities comprise part of multi-stakeholder advisory committees that are influencing policy from the local to the national level. In Finland, the legislative impact on the rights of persons with disabilities is being considered through consultation and impact assessment when amending the Climate Act. “Green” contracts and government employment opportunities should integrate strategies such as quotas and procurement to promote the employment of people with disabilities. States should employ inclusive sustainable design because contemporary urban spaces, including schools, too often are inaccessible. More generally, national-level disability disaggregated data and monitoring of the effects of both climate change and climate resilience initiatives would build accountability. Persons with disabilities whose human rights are threatened by climate change can seek redress directly or through litigation from their own states to break down barriers to equality and promote their rights.

Disabled persons face obstinately high unemployment rates—in Africa seventy to eighty percent of persons with disabilities are unemployed—violating their right to employment and depriving societies of their unique capabilities. By contrast, transforming societies so that global warming is limited to 2·0°C is predicted to generate a net increase of 18 million jobs, thus potentially providing inclusive and sustainable employment opportunities for persons with disabilities. Ensuring that training and employment in new green and high technology jobs in fields such as organic and conservation agriculture, sustainable tourism, renewable energy, redesigning

192. See Michelle Villeneuve, Building a Roadmap for Inclusive Disaster Risk Reduction in Australian Communities, 10 PROGRESS IN DISASTER SCI. 1 (2021), http://dx.doi.org/10.1016/j.pdisas.2021.100166.
196. Weibgen, supra note 28, at 2465.
infrastructure, designing new technology, rebuilding biodiversity, or artificial intelligence do not discriminate against disabled persons will be important to creating equitable and sustainable societies. In the Jibika project in Bangladesh, entrepreneurs with disabilities establish businesses cultivating vegetables, aquafarming, or vermicomposting following training in farming and marketing; assistance is provided in procuring microfinance. Skills training, inclusive microfinance, and social capital are vital for establishing pathways to self-employment for green entrepreneurs with disabilities. Empowering disabled people as sustainable economic actors is a powerful means to overcome the potential negative effects of climate change. Valuing indigenous knowledge and technology will also provide insights into living sustainably within local environments. Indigenous people with disabilities should thus have a seat at the table and be heard.

Creating sustainable universal designs and technologies by and for persons with disabilities will be vital to developing inclusive climate resilience. Contemporary urban environments are often inaccessible, but use of smart technologies and sets of standards may enable built environment consultants to incorporate both environmentally sustainable and socially sustainable universal design features in urban forms, reflecting international policy initiatives such as the New Urban Agenda. In a progressive partnership model, UN-Habitat, which promotes sustainable urban development, has signed a memorandum of understanding with the World Blind Union to spur accessibility and universal design in its programs.

Technology’s role in heightening disability-inclusive climate resilience is clearly evident, from disaster management to inclusive employment. A ramp for boarding a rescue boat allows the efficient boarding of persons

201. Leif Atle Beisland & Roy Mersland, Microfinance and Disability: Recommendations for Policy Makers and Practitioners, in Disability and Equality at Work 175 (Jody Heymann, Michael Ashley Stein & Gonzalo Moreno eds., 2012).
206. UN-Habitat, UN-Habitat and the World Blind Union Sign a Milestone Agreement to Work Together to make Cities Accessible to All (3 Feb. 2020) https://perma.cc/YYZ7-V59E.
with disabilities as well as all other passengers, including pregnant women and families with small children. Telecommuting until recently was viewed by many employers as an inefficient or unachievable means of employing people, including those with disabilities, but has become recognized during the COVID-19 pandemic as an essential part of the workplace.207 Currently, in developing urban areas with limited accessibility, telecommuting provides vital education and employment opportunities to persons with disabilities while also reducing carbon emissions associated with commuting to office spaces. Technology developed by and for persons with disabilities has proven beneficial to mainstream societies in many ways, including the internet, email, and “family” bathrooms.208

Empowering people with disabilities and DPOs as crucial climate actors is essential so that they develop climate resilience within their families, communities, and societies. However, they have been conspicuously underrepresented in the environmental movement, reflecting eco-ableism—discrimination through ability expectations that result in the exclusion of persons with disabilities. Environmental actors, including NGOs, can collaborate with local DPOs or develop the capacity of local persons with disabilities catalyzing DPO or DPO network formation around disability-inclusive climate action. The Global Greengrants Fund, for instance, has funded a DPO advocating against oil extraction in the Niger Delta and developed DPO capacity on environmental justice.209 Climate resilience education can empower people with disabilities to take action to safeguard their families and communities. In the Pamismas project in rural Indonesia, for instance, people with disabilities were trained to become control group members and thus had input into water access design and placement.210 In the Gaibandha Model in Bangladesh, DPOs have developed inclusive employment which provides income so that families may raise their houses and protect their drinking water.211 These DPOs contribute to their entire communities by providing accessible warnings through loudspeakers and flags, and by distributing relief aid.212 Persons with disabilities in Niger, where the growing season is shortening, were empowered to develop “survival yards”—gardens surrounded by trees creating sheltered microclimates with a well and water canal in which they

208. For numerous examples, see Bess Williamson, ACCESSIBLE AMERICA: A HISTORY OF DISABILITY AND DESIGN (2017).
211. CBM, SAVING LIVES AND LEAVING NO ONE BEHIND: THE GABANDHA MODEL FOR DISABILITY-INCLUSIVE DISASTER RISK REDUCTION 46 (2018), https://perma.cc/T4NK-G8VV.
212. Id. at 27.
grow food for themselves and the community. Disability-inclusive climate empowerment enables individuals with disabilities and their DPOs to “Build Back Better” climate secure, sustainable, and equitable communities.

States facing climate change, a pandemic, and budget constraints may question whether they have the resources for ensuring a disability-inclusive approach to climate change. The correct question, however, is whether they can afford not to include their largest minority population. Transforming states to a low carbon future requires a paradigm shift in climate financing whereby funds are directed only toward a socially and environmentally sustainable future, and funds are not directed toward counter-productive and ultimately costlier-to-fix applications such as inaccessible and unsustainable buildings and unsustainable agricultural practices. Climate change financing and economic assistance, as with all development assistance, can be reconfigured in a disability-inclusive manner by consulting with and ensuring the inclusion of persons with disabilities in the creation and implementation of technical assistance, policy, programming, and monitoring.

V. CONCLUSION

States have largely neglected to develop or implement meaningful disability-inclusive climate mitigation and adaptation measures. Here, we have set out the legal obligations compelling disability-inclusive climate action and articulated a climate justice approach to catalyze participatory disability climate action internationally, nationally, and locally. We have argued that states, together with DPOs and environmental actors, should develop responses that simultaneously enhance climate resilience and human rights both for people with disabilities and the whole society. Now is the time for disability-inclusive climate justice.