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Climate Disaster Risk, Disability, and Resilience

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The climate crisis has already arrived. In a speech at Columbia University in December 2020, United Nations Secretary-General António Guterres bluntly observed,

Disability and Equality

Third in a series

"The state of the planet is broken." The frequency and severity of climate change–related hydro-meteorological events (extreme temperatures, drought, wildfires) and climatological events (storms, floods, avalanches, landslides) are increasing, and they often occur as compounding events. The number of climate-related disasters has tripled in the past 30 years.

In 2020, Australians witnessed unprecedented and catastrophic firestorms following the country's hottest year on record and a prolonged drought. Next came flooding in Indonesia, super-cyclone Amphan hitting the coasts of India and Bangladesh, and more flooding in Kenya and large swaths of Central and West Africa. Then there were soaring temperatures and wildfires in the Siberian Arctic, the Brazilian Amazon, South America's Pantanal wetlands, California, and Colorado, followed by a historic hurricane season in the Atlantic, including two apocalyptic storms in Honduras and Nicaragua. Records continue to be broken in 2021 by compounding events, such as the heatwaves and wildfires that descended on northwestern North America in mid-2021, preceded by intense drought, while Germany and China experienced severe floods in July.

These events do not create disasters on their own. They act as trigger points that expose existing and often deeply rooted inequalities and injustices that influence every aspect of daily life. People who are socially, economically, culturally, politically, and institutionally marginalized in society are also disproportionately impacted by climate-related disasters.

The plight of these so-called vulnerable and marginalized groups—their heightened exposure to risk and their struggle to respond and recover effectively—often dominates disaster narratives through the emergency and recovery phases. One of these groups is people with disabilities. "Disability" is a contested term with no agreed definition. Here, I define disabilities as long-term physical, mental, intellectual, or sensory impairments that, in interaction with various attitudinal, environmental, and institutional barriers, may hinder full and effective participation in society on an equal basis with others.

The typical disaster and disability narrative goes something like this:

Disasters triggered by hydro-meteorological and climatological events disproportionately impact people who are marginalized. This includes people with disabilities, who account for 15 percent of the world's population (approximately 1 billion people), making them the world's largest minority group. The high impact of disasters on people with disabilities is reflected in disaster mortality rates. They are four times more likely to die from disasters than people without disabilities. Yet they largely remain unaccounted for in disaster risk reduction and climate change policies, practices, and planning. This increases their vulnerability to escalating risk and compounds their marginalization.

This empirically grounded narrative is important for multiple reasons. First, it shines a light on the enduring systemic inequalities in societies—the

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unequal distribution of resources underpins differential vulnerability and resilience levels found within and across communities. Second, it validates the need for a more equitable distribution of resources to enable "vulnerable" groups to respond more effectively to increasing risks that are exacerbated by climate change. Third, it justifies the need for more place-based research and funding to facilitate the design and implementation of appropriate action on the ground.

There is an unintended downside to this narrative focused on victims and their needs, however. It depicts people with disabilities as dependent on others, completely overlooking their abilities and strengths in responding to risk. This further robs them of their voice and sovereignty.

The narrative must change to recognize people with disabilities as resourceful change makers. But this alone will not change their systemic marginalization or increase their resilience to risk. Narratives grounded in equity, justice, sovereignty, and strength must be accompanied by clear examples that show how people with disabilities can be agents of change in their own communities. This will help overturn negative stereotypes and provide others with role models to follow.

Changes also need to be made in societal and institutional cultures that too often reinforce the narrative of victimhood and pit different "vulnerable" groups against each other in competition for limited resources. And institutional structures and processes must change to enable people with disabilities and other "vulnerable" groups to have permanent and influential seats at the tables where disaster and resilience strategies are debated and policies are made.

OLD BARRIERS

The vulnerability of people with disabilities to climate change–related risk and other hazards is due to multiple and self-reinforcing socio-cultural, economic, political, and physical obstacles that they face in their daily lives. They are "dis-abled" by normalized structural and attitudinal barriers that focus on their differences instead of their aptitudes. This dis-abling process begins with how the broader society sees and values them and their contribution to society. In most cultures, people with disabilities are robbed (consciously or not) of their human agency and a public voice by enduring religious, charity, and medical models of disability.

The moral/religious model is the oldest one, found in several faith traditions. Disability is often regarded as a divine punishment for sins that may have been committed by a person with disabilities or their parents or ancestors. Children with disabilities may be seen as karmic punishment for their or their parents' (particularly the mother's) past behavior, so they are often hidden away to avoid ridicule and maintain family reputations.

The charity model is also rooted in religious ideas, but sees people with disabilities as victims of their circumstances and objects of pity. It is used to justify a culture of care and protection.

The medical model sees disability as a deficiency in physiological functioning, which requires individualized solutions to the perceived problem. People are judged to be physiologically impaired and therefore incapable of performing tasks within a normal range or making decisions for themselves.

Despite their differences, each of these models depicts people with disabilities as being "less than" others in some way, and in need of special treatment and care for functional or compassionate reasons. Not only does this create low societal expectations of their capabilities and lead to the loss of independence, choice, and control in their lives. It also reinforces needs-based social policy that is heavily skewed toward the provision of welfare to dependent recipients.

These negative attitudes are normalized in everyday practices and laws that curtail access to education and livelihood opportunities, social support systems, and public and private spaces. The resultant social and economic disadvantages are brutally exposed when disasters occur. People with disabilities are generally poorer than the general populace because of routine exclusion from opportunities to escape cycles of poverty and disadvantage. They typically reside in areas that are more exposed to climate-related hazards and events, in low-quality housing that is more likely to be damaged. Their access to the resources needed for timely evacuation and rebuilding efforts (most notably money and insurance) is limited.

> *There is a disconnect between disability rights–based laws and disaster risk policies.*

In a disaster, people with disabilities face physical and environmental barriers to accessing shelter and safe spaces. Evacuation routes, shelters, transportation, and early warning systems are often inaccessible to people with different disabilities. People with mobility disabilities have been left behind in emergency situations because they were not assisted or accommodated by building designs and emergency plans. They have also been turned away from emergency shelters due to overcrowding and inaccessibility—no ramps to accommodate wheelchairs, doorways too narrow for wheelchairs to pass through, and inappropriate washroom facilities. When people with disabilities do gain access to shelters, they often face discrimination, harassment, and harm at the hands of other survivors.

People with disabilities are also less prepared for disaster events than those without disabilities. They often have little knowledge of possible hazards and how to reduce their risk levels. They have disproportionately low literacy levels due to limited or interrupted access to education. Access to information in accessible formats (sign language, simplified language, Braille) is limited, and mediums used to deliver emergency messages (television and radio alerts, door-to-door warnings, social media) are often inappropriate and inaccessible.

Deaf people find it difficult to communicate effectively with emergency responders due to differences in languages used (sign language and/or home signs versus the dominant spoken language of the "hearing world"). They also face a shortage of sign language interpreters, who are often caught up in the same disaster.

Vulnerability to risk is also gendered. Women, including those with disabilities, are more likely to be stranded at home during a disaster and less mobile post-event due to caretaking roles and traditional divisions of labor. Strong cultural norms in highly patriarchal societies can deter women from leaving male-dominated households during disasters for fear of social and familial recriminations. Discouragement of their participation in physical activity also means women are less likely to be able to swim or climb trees or structures to escape flood waters or tsunamis.

Disasters also lead to gender-specific disadvantages in the aftermath. Men may be given better medical assistance, greater access to food relief, and longer-term monetary assistance than women and girls. Strict social rules on gender mixing can hinder women's access to medical care if female doctors are unavailable. Women and girls with disabilities are at even greater risk of violence, physical abuse, and sexual exploitation after disasters. Persistent gender disparities in labor force participation leave women with less financial independence and connectedness to power than men.

Stereotypes that have historically characterized women as weak, naïve, passive, and dependent are amplified for women with disabilities and render them socially invisible. These disempowering stigmas are often reinforced in post-event disaster accounts that normalize cultural narratives of victims left helpless by their physiological limitations.

BIASED DISASTER MANAGEMENT

International frameworks and legally binding conventions—such as the 2006 United Nations Convention on the Rights of Persons with Disabilities (UNCRPD), the Sendai Framework for Disaster Risk Reduction 2015–30, and the Incheon Strategy 2013–22—recognize that inclusion of people with disabilities and other marginalized groups in disaster management processes is a human right and must be factored into policy and practice. Under these agreements, people with disabilities must also be afforded the same right as any other citizen to equal participation in the design and implementation of disaster risk reduction policies and practices.

Yet there are still legislative, policy, and procedural barriers to disaster justice for people with disabilities. A disconnect remains between disability rights–based laws and disaster risk policies and practices. There is a lack of robust guidelines and examples for how to bring disability-inclusive disaster risk reduction (DiDRR) into mainstream policymaking.

Current disaster management paradigms and response plans are biased toward helping the already privileged and physically abled. Disaster provisions for those with disabilities tend to be included as "add-ons" to core plans, and are often seen by disaster managers as a costly burden that requires specialist services and expertise. Such biases force different "vulnerable" and marginalized groups to compete against each other for limited resources, which deters collaboration and duplicates effort.

Disaster risk reduction actors, emergency responders, and humanitarian aid organizations

often have little knowledge or training on what people with different disabilities need before, during, and after events. Consequently, they lack the skills and capacity needed to mainstream more inclusive practices. In government agencies, there is often limited (or no) application of universal design principles to guide the making of environments, products, and communications that are accessible to everyone.

A lack of baseline data and clear legal and practical DiDRR directives undermines enforcement, accountability, and the measurement of results. Too often, no single overarching authority is tasked with ensuring adherence to inclusive policies.

But one of the biggest barriers to achieving greater disaster justice is the lack of clear pathways and platforms for people with disabilities, their representative organizations, and disability advocacy groups to be routinely included in disaster risk reduction policy, planning, and implementation processes. These processes are largely top-down and rigid, lacking adequate mechanisms (such as cross-sector policies and structures) to ensure the inclusion and active participation of people with disabilities.

There are few platforms to link disaster risk reduction managers and humanitarian organizations with those who have the skills and knowledge they lack—disability support organizations and people with disabilities themselves. As a result, disaster authorities and disability groups often act in isolation from one another, which impedes coordination and implementation of inclusive policies.

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RECOGNIZING SOVEREIGNTY

There is no doubt that people with disabilities are highly vulnerable to climate change risk. But the more important story is their resilience and strength. This resilience is developed over a lifetime as they navigate, cope with, and overcome multiple socially constructed barriers in a world that routinely sees them as deficient or "less than" others in some way.

Society, as well as disaster risk reduction decision-makers and actors, must recognize people with disabilities as the resourceful change makers that they are, or can be, if they are given the right support. These narratives need to be grounded in principles of equity, justice, and sovereignty. This position aligns with the social and human rights models of disability.

The social model of disability views disability as a social construct. The problem, therefore, lies with society and not the individual. Adherents of this model see disabilities as normal human variations. They blame discriminatory laws, institutions, and politicized practices for "dis-abling," discriminating against, and oppressing people with impairments that fall outside the medically determined spectrum of "normal functioning." Their focus is on anti-discrimination laws rather than welfare programs.

Anchored in the UNCRPD, the human rights model of disability similarly recognizes the disabling conditions that exclude people with disabilities from all aspects of daily life, but goes further. It focuses on both the multifaceted individual (who has multiple social identities) and the societal context that creates and perpetuates intersectional discrimination. It proffers a set of moral principles and values to underpin transformative disability policy and processes. Central to this model is recognition of the inherent dignity and self-worth of people with disabilities. It affirms that they are entitled to the same respect and civil, political, economic, social, and cultural rights as others—most notably the right to speak for oneself and be heard.

Here, the importance of individual sovereignty comes to the fore. This principle encompasses the unique authority over the jurisdiction of one's body and the right to give or withhold consent over what becomes of that body. Sovereignty also includes self-determination: the unique authority over one's actions and choices, and the right to express one's individuality in thought and feeling. Most critically, sovereignty calls for societal recognition of and compliance with both of these conditions.

TRANSFORMING DISASTER RESPONSE

People with disabilities are the experts on their own lives. They are best placed to inform and shape disaster risk reduction and response plans that are inclusionary and in compliance with both the UNCRPD and the Sendai Framework, which adopt this human rights approach to disability.

To counter negative stereotypes and provide others with role models, narratives emphasizing

sovereignty, ability, and strength must be supported with examples of people with disabilities being agents of change in their own communities. There are growing numbers of such examples in the disaster space. In a decade of collaboration with the Deaf community (defined here as those who identify as being culturally Deaf and use sign language as their preferred language), I have come across some inspirational individuals and organizations that are paving the way for greater inclusion of Deaf people in disaster risk reduction and response.

One such group is International Deaf Emergency (IDE), a disabled people's organization (DPO) that was founded and is run predominantly by Deaf people. Its mission is to bridge the language, communication, and relationship gaps between Deaf people (as well as those with any form of hearing impairment) and emergency services in order to promote greater inclusivity in disaster policy and practice. The aim is to improve pre-disaster preparedness and mitigation, disaster rescue and relief, and post-disaster rehabilitation, reconstruction, and recovery for Deaf people and those with hearing impairments.

IDE has contributed to humanitarian work in Haiti (most notably after the 2010 earthquake), China, and Nepal, becoming an internationally recognized disability advocacy group. Its success in advocating for greater inclusion of people with disabilities in disaster policy and practice is a function of its connectedness to avenues of power and influence. IDE has secured direct consultation status with the UN and the European Union, with the backing of the World Federation of the Deaf.

Another notable group is the Deaf Disaster Assistance Team–Disaster Risk Reduction (DDAT–DRR), an independent DPO in the Philippines that was established by and for Deaf and hard of hearing people. DDAT–DRR educates communities on emergency preparedness and advocates for equal access to disaster information. It also trains Deaf, hard of hearing, and Deaf–Blind people to lead workshops with local and provincial government emergency and health services to heighten awareness of their communication needs during emergencies.

In another example of promoting inclusion, the Deaf Society of the Australian state of New South Wales worked in collaboration with the state's emergency services to increase the resilience of Deaf community members to escalating climate-related hazards. A key component of this 2015 project was the training of volunteer Deaf liaison officers to form a bridge of trust, cross-cultural knowledge, and collaborative action between the Deaf community and emergency services.

The liaison officers design and lead community preparedness workshops for Deaf people and Deaf awareness training for emergency services personnel. They advise those personnel on accessibility and cultural appropriateness standards to consider when developing new resources and campaigns, and have assisted in the making of preparedness videos. They also consult on and take part in emergency services training, giving staff first-hand experience interacting with Deaf people in simulated disaster situations.

IDE, DDAT-DRR, and the Deaf liaison officers in New South Wales have been instrumental in advocating for and facilitating inclusive disaster management and greater sovereignty for people with disabilities. Their work on raising awareness of the needs and capabilities of people with disabilities and DiDRR training has increased the knowledge and capacity of disaster authorities, enabling them to work more effectively with Deaf, Deaf-Blind, and hard of hearing people in order to support them before, during, and after dangerous events.

These initiatives have also helped to bridge the cultural divide between emergency services and Deaf community members and create pathways for ongoing engagement. Most importantly, they have helped redress the enduring stigma, discrimination, and systemic marginalization faced by people with disabilities in society, specifically within institutions responsible for disaster management. Their successes can provide other DPOs with models for effective engagement with disaster risk reduction processes.

Yet such successes do not occur in a vacuum. They are constrained by existing socio-political structures and processes that award more power, freedoms, and resources to some groups, while restricting the entitlements and influence of others. Many DPOs still lack adequate information on disaster and climate risks, appropriate responses, and policy frameworks. They are largely unaware of existing programs and often lack the funding needed to advocate for greater support.

FULL PARTICIPATION

Political will is essential to transforming disaster risk reduction and climate change programs to ensure that people with disabilities are not further marginalized. People with disabilities and their

representative organizations have the right to participate in disaster policy planning, implementation, and monitoring processes. Accessible and appropriate platforms must be provided so that they can help shape equitable, just policies for disaster management and other aspects of climate adaptation.

Both the UNCRPD and the Sendai Framework affirm the right of people with disabilities to have a permanent, influential presence in forums for debating and shaping policy on disaster response and resilience. This requires the removal of the physical, informational, communication, and other barriers that prevent their full participation. Among other steps, this means ensuring that physical or virtual sites for meetings are accessible to people with a diverse range of disabilities or impairments, and delivering information in accessible formats, providing sign language interpretation and Braille materials when needed.

Such changes must also be backed up by enforceable legislation and measurable targets. But for that to happen, power must be ceded and shared. This is not yet happening at the scale needed to bring about sustained, transformative change.

The key to achieving greater equity for people with disabilities in everyday life, and particularly in disaster risk reduction and climate change responses, is learning either how to work within existing institutional processes and structures, or how to create new landscapes of power, recognition, and opportunity. Having structures and processes in place to foster greater equity in disaster policy and practice is not enough. Disability advocacy groups and disabled peoples' organizations need to know how to use them to their best advantage.

This is best done collectively, with the aid of allies that have links to power. Social actors like IDE that simultaneously exploit all the opportunities available to them—through the development of strategic partnerships with institutions such as the UN, the EU, and the World Federation of the Deaf—experience greater success in securing the resources they need and the results they desire.

Highlighting and drawing on the strengths and diverse perspectives of people with disabilities will help bring about the design of more robust and inclusive disaster risk reduction and climate adaptation processes that uphold disability sovereignty. This transformative process will require collective action by governments, risk and adaptation experts, civil society, disabled peoples' organizations, and people with disabilities themselves. We are all part of the solution. ■