From COVID-19 to Climate Change: Disaster & Inequality at the Crossroads

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I. INTRODUCTION

Disasters expose and exacerbate inequality. Overlapping and intersecting disasters exacerbate inequality exponentially. Each disaster teaches us about ourselves—our local and global preparedness, our ability to process and respond to information and uncertainty, our ability to act

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collectively to minimize risks, and our ability to see and respond to existing structures of inequality.

More often than not, natural disasters¹—as we conceive of them in popular media and in academic scholarship—are singular events contained in space and time. They are hurricanes, wildfires, floods, volcanic eruptions, and earthquakes. They are at times devastating, but—unless they affect us directly—our memories of them tend to be short.

Pandemics are a different beast. They are, by their nature, diffuse, fast moving targets that spread across time and space. COVID-19 is no different. It is at once a global and a local crisis. It has spread at shocking speed across the world prompting near unprecedented levels of global and local social disruption.² It has taught us all how precariously we are perched at the intersection of globalization, environmental degradation, and disaster. It has taught us, if we can listen, the depth of crisis that can descend upon us unwittingly and how violently abrupt change can rip at the seams of social stability and structural inequality. It has taught us what we should have already known³ and what is and will be the story of climate change. Our interconnectedness—to one another and to the ecosystems upon which we depend—is both one of our greatest strengths and one of our greatest weaknesses.

Climate change brings the promise and perils of our interconnectedness to the fore. Even as we struggle to contain the pandemic, the wildfires, and the floods, our collective human behavior hurtles us towards an even more massive disaster, or rather, series of disasters. Our common—but unevenly experienced—drive for economic development powered by fossil fuels and the resulting intermixing of greenhouse gases in our shared atmosphere binds us all together. The vast majority of the gases came (and come) from a small handful of powerful states. Limiting dangerous anthropogenic climate change requires everyone, but particularly these states, to contain their emissions for the good of all, but especially for the good of those states that have contributed minimally to global emissions but now stand to suffer the greatest harms. The collective action nature of climate change is widely understood. The extent and unevenness of the distributions of harm—across and within states—is similarly well known.

^{1.} See generally Daniel A. Farber, Jim Chen, Robert R.M. Verchick, & Lisa Grow Sun, Disaster Law And Policy (2015) (focusing on natural disasters (as such) and pandemics) (disasters can be defined in any number of ways).

^{2.} See generally What Is A Disaster? New Answers to Old Questions (Ronald W. Perry & E.L. Quarantelli eds., 2005).

^{3.} See generally RACHEL CARSON, SILENT SPRING (1962).

Yet relatively little has been done to respond to this existential challenge. Little has been done to constrain the emissions that bring about the harm and little has been done to facilitate the efforts that are necessary to limit the injuries, the loss, and the damage that climate change entails.

In contrast to the acute harms of natural disasters and pandemics, the violence and disruption of climate change threatens to engulf us storm by storm, fire by fire, inch by inch of sea level rise before we can even agree that it is a disaster worth trying to avoid, minimize, or prepare for.

By now, the impacts of a warming world are evident and inevitable.⁴ There is no longer a serious debate as to whether climate change multiplies and compounds stresses on human and natural systems and amplifies the risk and implications of slow—and sudden—onset disasters. It does. Some of these risks can be avoided. Some can be alleviated. Some, however, may now—or soon—be inescapable. The nature of the pending risk is shaped by the degree to which the international community mobilizes to mitigate emissions, facilitate adaptation, and prepare for climate-related impacts that cannot be eased or eliminated.

The less we do to mitigate, adapt, and prepare, the more acute the risks of climate change become, especially in the global south and especially for already-vulnerable communities. We know this. With average global temperatures on track to exceed the 2°C global target, climate change is multiplying the number of people susceptible to poverty, undermining food security, intensifying heat and water stress, and increasing the risks of fires, storms, flooding, landslides, and infectious and parasitic diseases. In this world of amplified risk, the lines between

^{4.} See Intergovernmental Panel on Climate Change, Summary for Policy Makers, In: Global Warming of 1.5°C. An IPCC Special Report on the Impacts of Global Warming of 1.5°C Above Pre-Industrial Levels and Related Global Greenhouse Gas Emissions Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty, at 4 (2018), https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15_SPM_version_report_LR.pdf [https://perma.cc/7KKR-LJP6].

^{5.} U.N. Framework Convention on Climate Change, *Report of the Conference of the parties on its Twenty-First Session*, U.N. Doc. FCCC/CP/2015/10/Add.1, art. 2 (Jan. 29, 2016) [hereinafter *Paris Agreement*].

^{6.} Diana Liverman, Joy Jacqueline Pereira, and Patricia Pinho, *Climate: Dialing Down the Heat,* in FUTURE EARTH, *Our Future, Our Earth* 19, 21 (2020), https://drive.google.com/file/d/1chEx2Aewehp1_0nXYnERwUViJI6qR2hi/view [https://perma.cc/68A9-YJLK].

natural disasters, pandemics, and climate-related disasters blur and the interactions between these events intensify.

This essay explores how the unfolding COVID-19 pandemic exposes and exacerbates structural inequalities in ways that are both obvious and alarming. It suggests that, even as the pandemic worsens inequality it forces us to confront it, and to see how the impacts of climate change will ripple unevenly across existing pathways of disparity.

The essay begins by examining how the COVID-19 pandemic is spotlighting and intensifying inequality and suggests that the vivid harms of the pandemic compel us to do more and do better to address structural inequality. The essay then provides an account of how climate change interacts with and amplifies the inequality that natural disasters and the pandemic uncover then briefly weaves the role of the Warsaw International Mechanism for Loss and Damage (WIM) into the discussion. Here the essay suggests that the WIM creates an avenue through which to advance climate and equity-oriented recovery responses in the immediate wake of the pandemic. The essay concludes with an invocation to heed the lessons the pandemic is offering in order to avoid catastrophic climate disaster.

II. THE GLOBALIZATION & LOCALIZATION OF DISASTER & INEQUALITY

The pandemic is global. So too is the warming. But the illness and the deaths are personal and local. So too are the effects of the slow and sudden patterns of environmental change. The bodies lay too long in the streets and in the morgues. The school children grow increasingly anxious and inattentive. The elderly sit alone. The isolation and the fear are both personal and collective across the fractured communities.

Meanwhile, the rains come in torrents or they do not come at all. The crops fail. The lakes bloom in disquietingly green and red algae. The storms sweep away homes. The fires explode and rampage through communities with exhausting brutality. The hungry, the thirsty, and the displaced seek solace from neighbors and relief from the state.

Yet the disease spreads and the warming intensifies. Drivers of disasters start there, over there, or somewhere else—from the wet markets in China or the oil fields and coal-fired power plants in Texas—but the human suffering is felt here. It is felt among the migrant workers of India. It is felt in the nursing homes and the prisons of Ohio. It is felt in Kiribati where the seas threaten to reclaim the island and its people.

It is felt in Yemen where famine and drought compound the ravages of war.⁷

We understand that the root cause of these crises is us, but not only us; that the solution must be local, but also that it must be global. We sit together but six feet apart. We sit with our toes in the rising seas. We sit on the visible brink of a series of disasters of our own making. At the crossroads of our responses to these disasters is a shared and stressed Earth system, a deeply globalized economy and global polity, and a citizenry fractured by borders and identities but bound by shared needs and shared spaces. In this world where viruses pour across borders, greenhouse gases intermingle in the global atmosphere, and unsustainable patterns of consumption and inequality spread from state to state. Our global interconnectedness and mutual dependency expands even as our politics increasingly look inward.⁸

The COVID-19 pandemic has made all of us pay attention at the same time—the Presidents, the prison guards, the United Nations, the mayors, the great powers, and the powerless. Its disregard for borders, immediacy, and merciless morbidity simultaneously freezes us with fear and catalyzes us to action. Our collective fate and our individual lives hang in the balance. It is a simultaneously globalized and localized disaster; it is global climate change and regionalized Ebola wrapped into one. It is ours and it is theirs in a way we could not have imagined before. It is, or could be, a tipping point disaster. A disaster that helps smooth out the wrinkle in space and time mentality that allowed us to see natural disasters as contained in their local context, to imagine climate change as remote in cause and effect, and to depict patterns of globalization and the cascading effects of extreme events and slow-onset disasters as conceptually distinct.

^{7.} Tara Law, *The Climate Crisis Is Global, but These 6 Places Face the Most Severe Consequences*, TIME (Sept. 30, 2019, 6:19 PM EDT), https://time.com/5687470/cities-countries-most-affected-by-climate-change/ [https://perma.cc/D4KY-VSVQ].

^{8.} See David Kennedy, When Renewal Repeats: Thinking About the Box, 32 N.Y.U. INT'L & Pol. 335, 359 (2000).

^{9.} See also Timothy M. Lenton et al., Climate tipping points – too risky to bet against, NATURE (Nov. 27, 2019) (defining tipping points in the climate context), https://www.nature.com/articles/d41586-019-03595-0 [https://perma.cc/86HS-KX5R].

The harms of the COVID-19 global pandemic are (and will continue to be) incalculably high. ¹⁰ The harms of the creeping crises, ¹¹ suddenonset disasters, ¹² and abrupt change ¹³ associated with climate change will be even higher. ¹⁴ COVID-19 has much to teach us about disaster generally, and about our responses to climate change, specifically. ¹⁵ Leaving room for the layers of lessons to come, we know one thing for sure: ¹⁶ the pandemic is exposing and exacerbating structural inequalities within and between states. Disasters such as the COVID-19 pandemic, wildfires, earthquakes, and hurricanes do not discriminate, but the impacts do. ¹⁷ Disasters reveal and deepen the challenges felt by the most vulnerable members of society—the elderly, poor, children, women, racial minorities,

10. E.g., Four Months After First Case, U.S. Death Toll Passes 100,000, N.Y. TIMES (May 27, 2020), https://www.nytimes.com/2020/05/27/us/coronavirus-live-updates.html?action=click&module=Spotlight&pgtype=Homepage [https://perma.cc/H75T-3HY A]. See also U.N. Secretary-General, COVID-19 and Human Rights: We are all in this Together (Apr. 23, 2020), https://www.un.org/sites/un2.un.org/files/un_policy_brief_on_human_rights_and_covid_23_april_2020.pdf [https://perma.cc/4P8W-GLQP].

11. See, e.g., Oli Brown, Migration and Climate Change, 31 INTERNATIONAL ORGANIZATION FOR MIGRATION 9 (2008) (describing the slow and sudden impacts of climate change as they intersect with human behavior).

12. See, e.g., Peter Howard, Flammable Planet: Wildfires and the Social Cost of Carbon, Costofcarbon.org (Sept. 2014), https://costofcarbon.org/files/Flammable_Planet Wildfires and Social Cost of Carbon.pdf [https://perma.cc/AK87-K97R].

13. See, e.g., Lenton et al., supra note 9; Robert McSweeney, Explainer: Nine 'Tipping Points' that Could be Triggered by Climate Change, CARBON BRIEF (Feb. 10, 2020), https://www.carbonbrief.org/explainer-nine-tipping-points-that-could-be-triggered-by-climate-change [https://perma.cc/3NWK-4YSD].

14. See generally Ruth DeFries et al. The Missing Economic Risk in Assessments of Climate Change Impacts, Grantham Res. Inst. on Climate Change And the Env't (Sept. 2019), https://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2019/09/Themissing-economic-risks-in-assessments-of-climate-change-impacts-1.pdf [http://perma.cc/25BQ-AQP3]; Jeremy Martinich & Allison Crimmins, Climate Damages and Adaptation Potential Across Diverse Sectors of the United States, 9 NATURE CLIMATE CHANGE 397 (2019).

15. See Kimberly M.S. Cartier, Eight Lessons from COVID-19 to Guide our Climate Response, EOS.ORG (Apr. 24, 2020), https://eos.org/articles/eight-lessons-from-covid-19-to-guide-our-climate-response [https://perma.cc/6ML8-538F].

16. U.N. Secretary-General, COVID-19 and Human Rights: We are all in this Together (Apr. 23, 2020), https://www.un.org/sites/un2.un.org/files/un_policy_brief_on_human_rights_and_covid_23_april_2020.pdf [https://perma.cc/4P8W-GLQP].

17. E.g., Thomas Frank, Population of 10 Counties for Disasters: 81% Minority, E&E NEWS (June 8. 2020), https://www.eenews.net/climatewire/2020/06/08/stories [https://perma.cc/A2CQ-XX3Q]; Fabiola Cineas, Covid-19 is Disproportionately Taking Back Black Lives, VOX (Apr. 8, 2020), https://www.vox.com/identities/2020/4/7/2121184 9/coronavirus-black-americans [https://perma.cc/2R7Y-K74W].

and the politically disenfranchised.¹⁸ It seems COVID-19 is no different, but it is. It is a globe-sweeping disaster that is threatening us all, all at once, although not equally so. Within this already fraught context, climate change acts a threat multiplier,¹⁹ exacerbating existing and COVID-19 aggravated inequities and vulnerabilities. As disasters swell in number and intensity, so too do the compound effects.

Consider New Orleans. On August 29, 2005, Hurricane Katrina struck New Orleans. The storm and the resulting levee failures inundated the city, displaced the majority of residents, and resulted in almost 1000 deaths. ²⁰ Katrina devastated New Orleans. ²¹ The patterns of destruction reinforced existing patterns of inequality. ²² As one commentator observed "[d]uring disasters, poor people, people of color, and the elderly die in disproportionate numbers, and Katrina was no exception." ²³ As a result, recovering from Hurricane Katrina has been slow, especially for the most vulnerable, hardest hit members of society. ²⁴ Now 15 years later, New Orleans confronts a new crisis. ²⁵ COVID-19 has torn through

^{18.} See Pascaline Wallemacq et al., The Human Cost of Natural Disasters-a Global Perspective, Centre of Research on the Epidemiology of Disasters CRED (2015).

^{19.} See Jody Freeman & Andrew Guzman, Climate Change and U.S. Interests, 109 COLUM. L. REV. 1531, 1576 (2009).

^{20.} See Joan Brunkard et. al, Hurricane Katrina Deaths, Louisiana 2005, 2 DISASTER MED. & PUB. HEALTH AND PREPAREDNESS 215 (Aug. 28, 2008), https://www.cambridge.org/core/journals/disaster-medicine-and-public-health-preparedness/article/hurricane-katrina-deaths-louisiana-2005/8A4BA6D478C4EB4C3308D7DD48DEB9AB [https://perma.cc/TK86-LWYC].

^{21.} See generally Douglas Brinkley, The Great Deluge: Hurricane Katrina, New Orleans, And the Mississippi Gulf Coast (2006).

^{22.} See Troy D. Allen, Katrina: Race, Class, and Poverty, 37 J. OF BLACK STUDIES 466 (2007); Aftermath of Katrina: A Time of Environmental Racism, ArcGIS, (last visited Feb. 14, 2021), https://www.arcgis.com/apps/Cascade/index.html?appid=2106693b39454f0eb0abc 5c2ddf 9ce40 [https://perma.cc/MK95-PR88].

^{23.} Caroline Heldman, *Hurricane Katrina and the Demographics of Death*, SOCIOLOGICAL IMAGES (Aug. 29, 2011), https://thesocietypages.org/socimages/2011/08/29/hurricane-katrina-and-the-demographics-of-death/[https://perma.cc/2EZB-4TVJ].

^{24.} See Larkin M. Moore, Stranded Again: The Inadequacy of Federal Plans to Rebuild an Affordable New Orleans after Hurricane Katrina, 27 B.C. Third World L.J. 227, 223 (quoting James Dao, Study Says 80% of New Orleans Blacks May Not Return, N.Y. Times, Jan. 26, 2006, at A18).

^{25.} See, e.g., Alejandra Borunda, We Still Don't Know the Full Impacts of the BP Oil Spill, 10 Years Later, NAT'L GEOGRAPHIC, Apr. 20, 2020 (discussing other challenges and disasters New Orleans has faced in-between, including the Deepwater Horizon Oil

New Orleans and surrounding parishes.²⁶ In line with larger national patterns, New Orleans (and Louisiana's) black population has been hit hard.²⁷ Early data reveals that "[b]lack Louisianans are dying by COVID-19 at an alarmingly and disproportionately high rate."²⁸ Even as the State, the nation, and the international community struggle to contain the COVID-19 crisis and to develop effective responses, the disease intensifies social, economic, and health inequities. The inequities are deep and layered; they are historic, and they are contemporary. Every disaster the City faces exposes and aggravates these inequities.

Even as the acute arc of the pandemic smooths out and the City, ever resilient, begins to recover and rebuild, it faces another challenge and another impending disaster: climate change. Sometimes slowly, sometimes rapidly, climate change erodes existing natural systems and the human systems built on and around them. Climate change hides its face and thus appears as a looming, distant threat for future politicians and future generations to confront. Yet, for New Orleans—one of the U.S. cities most at risk for climate change impacts²⁹—the threat of climate change is as deadly as the current pandemic.

New Orleans emerged from Katrina with its soul intact and a spirit of resilience and regeneration. The same will prove true of the City's recovery from COVID-19. However, both disasters leave scars.³⁰ These repeated

spill), https://www.nationalgeographic.com/science/2020/04/bp-oil-spill-still-dont-know-effects-decade-later/ [https://perma.cc/G3SQ-CANE].

- 26. See Rachel Weinstein, Monitoring the COVID-19 Pandemic in New Orleans and Louisiana, The Data Center (Apr. 20, 2020), https://www.datacenterresearch.org/covid-19-data-and-information/covid-19-data/ [https://perma.cc/3WLT-VBHW]; Jenna Losh & Allison Plyer, Demographics of New Orleans and Early COVID-19 Hot Spots in the U.S., The Data Center (Apr. 20, 2020), https://www.datacenterresearch.org/covid-19-data-and-information/demographic-data/ [https://perma.cc/Y66G-KTJW].
- 27. See, e.g., Tegan Wendland, Black Communities Are Hit Hardest By COVID-19 In Louisiana And Elsewhere, NEW ORLEANS PUBLIC RADIO (Apr. 6, 2020), https://www.wwno.org/post/black-communities-are-hit-hardest-covid-19-louisiana-and-elsewhere [https://perma.cc/W6K6-LK8K]; David Benoit, Coronavirus Devastates Black New Orleans: 'This is Bigger than Katrina', WALL St. J. (May 23, 2020), https://www.wsj.com/articles/coronavirus-is-a-medical-and-financial-disaster-for-blacks-in-new-orleans-11590226200 [https://perma.cc/5E67-BP33].
 - 28. Weinstein, *supra* note 26.
- 29. CLIMATE ACTION EQUITY PROJECT, *Taking Steps Together on Equity and Climate Change: A Report By and For New Orleanians* (2019), https://issuu.com/greater neworleansfoundation/docs/2019.08.30_-_climate_action_equity_report_-_web [https://perma.cc/M8ZJ- AAGD].
- 30. See, e.g., Gary Rivlin, White New Orleans has Recovered from Hurricane Katrina: Black New Orleans has Not, TALK POVERTY (Aug. 29, 2016), https://talkpoverty.org/2016/

patterns of recovery and resilience can be seen all over the United States and all over the world, from New Orleans, to the Navajo Nation,³¹ to New York City, to Maharashtra,³² and São Paulo.³³ But, in an era of climate change, the distance between the crests and the troughs of the waves of disaster grows shorter and the amplitude of the waves higher.

III. CLIMATE AMPLIFICATION OF DISASTER & INEQUALITY

Each disaster compounds pressures on vulnerable populations, fractures the foundations of already weakened social and political systems, exposes the limits of the rule of law, and reveals the cumulative impact of intersecting social, political, economic, and ecological crises. Overlapping and intersecting crises are not new. Every human era is an era of crisis, and an era of disaster. Environmental change, likewise, is "as old as the planet itself." Yet, as human crises go, and as environmental change goes, the specter of climate change looms large.

The driver of climate change—our unquenchable thirst for fossil fuel energy—has propelled unparalleled levels of environmental degradation and global inequality.³⁵ Now the costs of that dependency are triggering disruption and suffering on a massive scale. That disruption falls most

08/29/white-new-orleans-recovered-hurricane-katrina-black-new-orleans-not/ [https://perma.cc/HLN3-77ZE].

- 31. See, e.g., Kalen Goodluck, COVID-19 Impacts Every Corner of the Navajo Nation, HIGH COUNTRY NEWS (May 19, 2020), https://www.hcn.org/issues/52.6/covid-19-impacts-every-corner-of-the-navajo-nation [https://perma.cc/CMR4-LRH8].
- 32. Coronavirus June 13 Highlights: PM Modi Meets Senior Ministers to Review Pandemic Response, THE INDIAN EXPRESS (June 14, 2020), https://indianexpress.com/article/india/coronavirus-india-latest-news-live-updates-corona-virus-covid-19-state-wise-cases-tracker-in-india-lockdown-covid-19-vaccine-today-news-update-6454733/ [https://perma.cc/LL4Q-C4RJ].
- 33. Coronavirus: Hospitals in Brazil's São Paulo 'Near Collapse', BBC NEWS (May 18, 2020), https://www.bbc.com/news/world-latin-america-52701524 [https://perma.cc/GC3H-HJJR].
- 34. See J.R. McNeill, Something New Under the Sun: An Environmental History of the Twentieth-Century World 3 (2000).
- 35. *Id.* at 15–16 ("[F]ossil fuel use has sharply increased the inequalities in wealth and power among different parts of the world."); Beth Gardiner, *Unequal Impact: The Deep Links Between Climate Change and Inequality* (interview with Elizabeth Yeampierre), YALE ENVIRONMENT 360 (June 9, 2020), https://e360.yale.edu/features/unequal-impact-the-deep-links-between-inequality-and-climate-change [https://perma.cc/CZ9Q-4W2F].

heavily on those least responsible for it, and those least able to bear it.³⁶ As Diana Liverman et al. (2020) explain: "Limiting warming to 1.5°C rather than 2°C reduces the number of people exposed to climate risks and susceptible to poverty by several hundred million by 2050 It is clear that every bit of warming matters, especially for the most vulnerable people and places."³⁷ The distributional inequities of climate change are known. Questions of climate justice have been the subject of extensive academic inquiry, ³⁸ have shaped climate negotiations, ³⁹ and now propel a burgeoning climate justice movement.

The climate justice movement brings together people from all over the world who have "endured the drastic effects of global warming and are striving to help their communities adapt," and to mobilize a "quest for climate justice." In the face of persistent political and legal inaction and continuing inattention to questions of justice and equality, the climate justice movement is pushing not merely for effective action on climate change, but for *just* action on climate change. Together, these "women and men from Kiribati to Uganda to Mississippi" are challenging mainstream climate leaders and offering a new vision of climate action and climate leadership. The climate justice movement they represent responds to "... the direct kinship between social inequality and environmental degradation..." Drawing from the longer-standing environmental justice movement, the climate justice movement envisions a world where we simultaneously limit the negative effects of climate change and reshape existing social, political, and economic relationships along the way.

Bringing a multivocal, justice-oriented approach to climate change encourages policies such as the *Green New Deal*.⁴³ Such policies seek to

^{36.} See, e.g., Margaux J. Hall & David C. Weiss, Avoiding Adaptation Apartheid, 37 YALE J. INT'L L. 309, 310 (2012).

^{37.} Liverman et al., *supra* note 6, at 23.

^{38.} See, e.g., Mary Robinson, Climate Justice (2018); Rosemary Lyster, Climate Justice and Disaster Law 131 (2015); Henry Shue, Climate Justice: Vulnerability and Protection (2014).

^{39.} See, e.g., Cinnamon P. Carlarne & JD Colavecchio, Balancing Equity and Effectiveness: The Paris Agreement and the Future of International Climate Change Law, 27 N.Y.U. ENVTL. L.J. 107 (2019); Lavanya Rajamani, The Principle of Common but Differentiated Responsibility and the Balance of Commitments under the Climate Regime, 9 REV. EUR. CMTY. & INT'L ENVTL. L. 120, 124 (2000).

^{40.} ROBINSON, *supra* note 38, at 12–13.

^{41.} *Id*.

^{42.} See, e.g., Maxine Burkett, Just Solutions to Climate Change: A Climate Justice Proposal for a Domestic Clean Development Mechanism, 56 BUFF. L. REV. 169, 170, 188, 193 (2008).

^{43.} H H.R. Res. 109, 116th Cong. (2019).

situate climate change within its broader social context and create opportunities for minimizing the disparate harms of climate change and maximizing the social and economic opportunities associated with transitioning justly to a low-carbon economy. It is a way of thinking and being that builds on the long-standing work of leaders such as Nobel prize winner, Wangari Maathai, whose environmental activism emerged from and fused with efforts to improve the lives of women and vulnerable members of society by tackling the root causes of inequality. Despite knowing what we know about the harms of climate change, and despite the swelling voice of the climate justice movement, little has been done to address the inequitable impacts of climate change, much less to unravel the deep systemic inequalities that it exacerbates.

Even though further prompting should not be necessary, the COVID-19 pandemic provides a vivid reminder of why "equity and justice must be the foundation of global climate action." This story is not new. The inequalities we are witnessing are not new either, although recent extreme patterns of economic inequality are. ⁴⁹ The idea that natural disasters are exacerbated by human decisions is not new. ⁵⁰ Calls for structural reform

^{44.} See, e.g., Anna Kaijser & Annica Kronsell, Climate Change Through the Lens of Intersectionality, 23 ENVT'L. POL. 417, 417 (2014).

^{45.} The Nobel Prize, *Wangari Maathai: Nobel Lecture* (2004), https://www.nobel prize.org/prizes/peace/2004/maathai/facts/ [https://perma.cc/Z58Z-WW4G].

^{46.} See, e.g., Joshua E. Cinner et al., Building Adaptive Capacity to Climate Change in Tropical Coastal Communities, 8 NATURE CLIMATE CHANGE 117 (2018), https://www.nature.com/articles/s41558-017-0065-x [https://perma.cc/N2NV-Y77N].

^{47.} During 2020, the United States was engulfed in protests prompted by the senseless murder by the Minneapolis police of a black man, George Floyd, and persistent patterns of systemic racism and police violence. *See George Floyd Live Updates: Officials Brace for Fifth Night of Protests*, N.Y. TIMES (May 30, 2020), https://www.nytimes.com/2020/05/30/us/minneapolis-floyd-protests.html?action=click&module=Spotlight&pg type=Homepage [https://perma.cc/U46V-33GA]. *See also* Ayana Elizabeth Johnson, *I'm a Black Climate Scientist. Racism Derails our Efforts to Save the Planet*, WASHINGTON POST (June 4, 2020), https://www.washingtonpost.com/outlook/2020/06/03/im-black-climate-scientist-racism-derails-our-efforts-save-planet/ [https://perma.cc/J8WL-L3K9].

^{48.} Aparna Bole, *Climate Change: Lessons from the COVID-19 Pandemic*, AAP VOICES BLOG (Apr. 15, 2020), https://services.aap.org/en/news-room/aap-voices/climate-change-lessons-from-the-covid-19-pandemic.aspx/ [https://perma.cc/4FWV-2XCG].

^{49.} See Martha T. McCluskey, Constitutional Economic Justice: Structural Power for "We the People", 35 YALE L. & POL'Y REV. 271 (2016).

^{50.} See, e.g., Robert R.M. Verchick, FACING CATASTROPHE: ENVIRONMENTAL ACTION FOR A POST-KATRINA WORLD 104 (2010) ("[c] atastrophe is bad for everyone. But it is especially bad for the weak and disenfranchised.").

and greater attention to the analytics of power are not new.⁵¹ Within and beyond the climate context, inequalities and disparate levels of risk exist. For some, the resulting threats are existential—as real, as immediate, and as overwhelming as the global pandemic⁵²—for others they are too distant, too uncertain, too amorphous to merit urgent action, or to even know where to start.

Moreover, the human capacity to cope with trauma and intractable challenges is limited. Thus, even as pandemic-related limits on mobility bring about an unprecedented drop in greenhouse gas emissions,⁵³ the crisis has also derailed climate negotiations and, temporarily, obstructed a multitude of climate efforts across the globe.⁵⁴ However, as UN Climate Change Executive Secretary, Patricia Espinosa, declared when announcing that the 2020 climate meeting would be postponed, while "COVID-19 is the most urgent threat facing humanity today, . . . we cannot forget that climate change is the biggest threat facing humanity over the long term."⁵⁵

^{51.} See, e.g., McCluskey, supra note 49; Carmen G. Gonzalez, Beyond Eco-Imperialism: An Environmental Justice Critique of Free Trade, 32 DENVER U. L. REV. 1001, 1014 (2001); Makau W. Mutua, What is TWAIL?, 94 PROCEEDINGS OF THE ASIL ANNUAL MEETING 31 (2000).

^{52.} See, e.g., FEDERATED STATES OF MICRONESIA INTENDED NATIONALLY DETERMINED CONTRIBUTION, at 3–4 (2016), https://www4.unfccc.int/sites/ndcstaging/Published Documents/Micronesia%20First/Micronesia%20First%20NDC.pdf [https://perma.cc/9CXQ-DHBS] ("the very survival of many [small island developing states (SIDS)] is at stake without ambitious global emissions reductions").

^{53.} See, e.g., Corinne Le Quéré et al., Temporary Reduction in Daily Global CO2 Emissions During the COVID-19 Forced Confinement, NATURE CLIMATE CHANGE (2020), https://doi.org/10.1038/s41558-020-0797-x [https://perma.cc/EJJ6-FL4M] (estimating that by early April [2020], daily global carbon dioxide emissions fell by 17% compared with 2019 levels.).

^{54.} See, e.g., Chloé Farand, Delay to Climate Talks Deepens Uncertainty Over Future of Carbon Markets, CLIMATE HOME NEWS (June 5, 2020), https://www.climatechangenews.com/2020/06/05/delay-climate-talks-deepens-uncertainty-future-carbon-markets/[https://perma.cc/8QEW-5KS4].

^{55.} Press Release, U.N. Framework Convention on Climate Change, COP 26 Postponed, U.N. Climate Press Release (Apr. 1, 2020).

IV. REBUILDING STRONGER: MOBILIZING CLIMATE LAW AT THE DISASTER-INEQUALITY INTERSECTION

Abrupt change, tipping points, creeping crisis, and mass migration;⁵⁶ climate change foretells all of this and more.⁵⁷ These climate-induced threats interact with COVID-19, natural disasters, and global inequality. After three decades of efforts to structure climate change law, we have learned that climate change is not a discrete challenge demanding discrete responses.⁵⁸ Rather, climate change is the backdrop, and the context within which society exists and evolves. It challenges the resiliency and integrity of social and legal systems and demands that we think broadly about how to engage the rule of law as a tool in efforts to limit the causes and consequences of climate change.

This is a daunting challenge. But it is also an opportunity. In a world shaped by inequality but imbued with human and natural capital, approaching climate change as the structural problem that it is creates the opportunity to mobilize "one of the most profound attacks on global poverty and inequality ever to take place." Short of throwing out the entire playbook, where can one start in this endeavor? The climate justice movement is advancing this project. Youth activists are mobilizing for change worldwide; progressive politicians are pushing for integrated approaches to climate change and economic inequality. Within the constructs of international

^{56.} GOVERNMENT OFFICE FOR SCIENCE, LONDON, FORESIGHT: MIGRATION AND GLOBAL ENVIRONMENTAL CHANGE, FINAL PROJECT REPORT, 2011 (U.K.), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/287717/11-1116-migration-and-global-environmental-change.pdf [https://perma.cc/EV6C-CN5W]; TIM STEPHENS, LOWRY INSTITUTE, THE INTERPRETER, SEE YOU IN COURT? A RISING TIDE OF INTERNATIONAL CLIMATE LITIGATION (Oct. 30, 2019).

^{57.} See, e.g., CLIMATE CHANGE 2014, SYNTHESIS REPORT, SUMMARY FOR POLICYMAKERS, FIFTH ASSESSMENT REPORT, UNFCCC (2014), https://www.ipcc.ch/site/assets/uploads/2018/02/AR5 SYR FINAL SPM.pdf [https://perma.cc/GB26-FQMJ].

^{58.} See, e.g., Cinnamon Carlarne, Delinking International Environmental Law & Climate Change, 4 Mich. J. Envill. & Admin. L. 1, 6 (2014).

^{59.} ROBINSON, *supra* note 38, at 9.

^{60.} See, e.g., Angely Mercado, The Youth Climate Movement is Just Getting Started, THE NATION (June 13, 2019), https://www.thenation.com/article/environenvi/the-youth-climate-movement-is-just-getting-started-global-warming-fridays-for-future/[https://perma.cc/6DJV-V4ZW].

^{61.} See Tara Law, Rep. Ocasio-Cortez Becomes Youngest Woman Ever to Preside Over House of Representatives, TIME (May 11, 2019), https://time.com/5587669/ocasio-cortez-youngest-woman-preside-house [https://perma.cc/VH2C-J8LS].

climate law, one of the most likely tools for advancing these efforts is the Warsaw International Mechanism for Loss and Damage (WIM).⁶²

Considerations of loss and damage often manifest as claims that wealthier, heavy emitting states should provide financial (and other) assistance for poorer and more climatically vulnerable states that experience climate-related disasters. These considerations have been part of climate negotiations since the very beginning. As Wil Burns points out, as early as 1991, "Vanuatu, on behalf of the Alliance of Small Island States ("AOSIS"), called for the establishment of an insurance pool to assist small island States to cope with the impacts of rising sea levels."

Despite being a long-term matter of discussion in negotiations, there is no agreed upon definition for loss and damage. Generally, loss and damage is understood to refer to the impacts of climate change—both economic and non-economic—that cannot be minimized or avoided through conventional mitigation and adaptation strategies. Loss may be "construed as "irrecoverable negative impacts," such as loss of freshwater resources or culture or heritage, while 'damage' are climatic manifestations from which ecosystems and human institutions can recover, such as impacts on infrastructure related to violent weather events or damage to mangroves from coastal surges." Moreover, the term has been framed variously to advance desired law and policy responses. As Julia Kreienkamp and Lisa Vanhala describe:

[d]eveloping countries have pushed for loss and damage to be treated as an independent policy track within the UNFCCC, separate from adaptation. They have also highlighted the need for financial support and compensation and the historic responsibility of developed countries. The latter, however, have strongly opposed framing loss and damage in terms of liability and compensation.⁶⁵

The political malleability of the term and deep political divides centered around questions of liability and compensation impeded conversations around loss and damage for years. Thus, despite early recognition that many of the most vulnerable, and least responsible states would suffer

^{62.} United Nations Climate Change, Warsaw International Mechanism for Loss and Damage Associated with Climate Change (WIM), https://unfccc.int/topics/adaptation-and-resilience/workstreams/loss-and-damage-ld/warsaw-international-mechanism-for-loss-and-damage-associated-with-climate-change-impacts-wim [https://perma.cc/T2S5-MGHJ] (last visited Nov. 1, 2020).

^{63.} See Dr. Wil Burns, Loss and Damage and the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change, 22 ILSA J. INT'L & COMP. L. 415, 415–19 (2016).

^{64.} *Id.* at 417.

^{65.} Julia Kreienkamp & Dr. Lisa Vanhala, *Climate Change Loss and Damage*, GLOB. GOVERNANCE INST. (March 2017), https://www.ucl.ac.uk/global-governance/sites/global-governance/files/policy-brief-loss-and-damage.pdf [https://perma.cc/DG5Y-HUR2].

disproportionately from slow- and sudden-onset climate disasters, for the first two decades of climate negotiations, little was done to enhance understanding of loss and damage or to develop institutional and financial tools for responding to unavoidable climate harms.

Finally, in 2010, the parties to the UNFCCC created the WIM to "address loss and damage associated with impacts of climate change, including extreme events and slow onset events in developing countries that are particularly vulnerable to the adverse effects of climate change." In 2015, the WIM was formally incorporated into the corpus of international climate law through Article 8 of the Paris Agreement. Article 8 situates loss and damage, alongside mitigation and adaptation, as the third pillar of climate policy. It does so by "recogniz[ing] the importance of averting, minimizing and addressing loss and damage associated with the adverse effects of climate change, including extreme weather events and slow onset events," and committing parties to "enhance[ing] understanding, action and support, including through the Warsaw International Mechanism, as appropriate, on a cooperative and facilitative basis with respect to loss and damage associated with the adverse effects of climate change." ⁶⁷

The WIM is tasked with finding ways to address the residual impacts of climate change by advancing understanding of comprehensive risk management approaches, strengthening dialogue and coordination, and enhancing action and support (including finance, technology, and capacity building) on loss and damage.⁶⁸ In 2017, the WIM Executive Committee completed its five-year work plan,⁶⁹ which emphasized the role of the WIM as providing an international infrastructure to support vulnerable countries

^{66.} U.N. Framework Convention on Climate Change (U.N. FCCC), Report of the Conference of the Parties on its Eighteenth Session, held in Doha from 26 to 8 December 2012. Addendum. Part two: Action taken by the Conference of the Parties at its eighteenth session, UN. Doc. FCCC/CP/2012/8/Add.1 (Feb. 28, 2013).

^{67.} Paris Agreement, supra note 5, art. 8.

^{68.} Ariadna Anisimov & Lola Vallejo, Loss and Damage Under the UNFCCC: Ways Forward for the Warsaw International Mechanism, IDDRI SUSTAINABLE DEVELOPMENT & INTERNATIONAL RELATIONS, ISSUE BRIEF No. 13 (Nov. 2019), https://www.iddri.org/sites/default/files/PDF/Publications/Catalogue%20Iddri/Décryptage/201911-IB1319-L%26D.pdf [https://perma.cc/A9EF-HQDB].

^{69.} U.N. FCCC, Five Year Rolling Workplan of the Executive Committee of the Warsaw International Mechanism for Loss and Damage associated with Climate Change Impacts (2017), https://unfccc.int/sites/default/files/resource/5yr_rolling_workplan.pdf [https://perma.cc/6DJU-NGZK] [hereinafter Workplan].

in tackling the unavoidable and irreversible consequences of climate change.⁷⁰

In the first decade of its existence, the WIM has advanced understanding of loss and damage challenges. The WIM, however, remains a hollow vessel. The WIM lacks actionable support, finance mechanisms, and funding. Moreover, critical questions of compensation and liability remain taboo. As late as December 2019, during an official review of the WIM⁷¹, as one commentator described:

Delegates from particularly vulnerable countries pressed for direct answers: Where was WIM when their country was being torn apart by a climate-exacerbated natural disaster? Why has WIM's work been so slow? And what is being delivered on finance? . . . There were no answers forthcoming. 72

No answers were forthcoming as to how to avert the loss of land, knowledge, and culture as entire islands are lost to the rising seas and indigenous cultures are overwhelmed. No answers were forthcoming about how to avoid the loss of fisheries, declines in crop production, and the rippling effects of desertification. No answers were forthcoming about how to respond to the massive, yet poorly understood challenge of climate-displaced peoples.⁷³ No answers were forthcoming about how to finance

^{70.} U.N. FCCC, Report of the Executive Committee of the Warsaw International Mechanism for Loss and Damage Associated with Climate Change Impacts. UN Doc. FCCC/SB/2017.1, annex (2017), https://disasterdisplacement.org/wp-content/uploads/2018/12/2018_FinalWIMReport_UNFCCC.pdf [https://perma.cc/5ZWU-S3UC]. See also Rebecca Byrnes & Swenja Surminski, Addressing the Impacts of Climate Change Through an Effective Warsaw International Mechanism on Loss and Damage: Submission to the Second Review of the Warsaw International Mechanism on Loss and Damage under the UNFCCC, GRANTHAM RES. INST. ON CLIMATE CHANGE AND ENV'T and CTR. FOR CLIMATE CHANGE ECON. AND POL'Y (Oct. 2019), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/201910251036—GRI WIM%20Submission.pdf [https://perma.cc/YU26-VW5].

^{71.} United Nations Climate Change, 2019 WIM Review Event (Dec. 1, 2019), https://unfccc.int/process-and-meetings/bodies/constituted-bodies/executive-committee-of-the-warsaw-international-mechanism-for-loss-and-damage-wim-excom/workshops-meetings/2019-wim-review-event#eq-1 [https://perma.cc/QY89-V27X].

^{72.} Tarun Gopalakrishnan, Climate Emergency CoP 25: A storm is brewing on 'Loss and Damage', DOWN TO EARTH (Dec. 3, 2019), https://www.downtoearth.org.in/news/climate-change/climate-emergency-cop-25-a-storm-is-brewing-on-loss-and-damage—68257 [https://perma.cc/S6U4-ALTS].

^{73.} See, e.g., Maxine Burkett, Behind the Veil: Climate Migration, Regime Shift, and a New Theory of Justice, 53 HARV. C.R.-C.L. L. REV. 445, 448 (2018); Margaretha Wewerinke-Singh & Tess Van Geelen, Protection of Climate Displaced Persons Under International Law: A Case Study from Mataso Island, Vanuatu, 19 MELB. J. INT'L L. 666 (2018); Katrina Miriam Wyman, Responses to Climate Migration, 37 HARV. ENVTL. L. REV. 167 (2013). See also United Nations Climate Change, Task Force on Displacement, https://unfccc.int/wim-excom/sub-groups/TFD#eq-1 [https://perma.cc/UD88-GL86] (discussing

responses to these harms. No real answers were available in late 2019 as to how to avert climate crisis. The WIM, at least, offered a forum within which the questions could reverberate, and the demands could take shape.⁷⁴

As Thoriq Ibrahim, Chairman for the Alliance of Small Island States (AOSIS), articulated in 2018, for small island nations, it is "suicide not to use every lever of power we have to demand what is fair and just: the support we need to manage a crisis that has been thrust upon us." That support is still inadequate, but the WIM provides the greatest institutional opportunity to foster loss and damage strategies that will offer AOSIS members and vulnerable populations worldwide "the best chance for survival."

As COVID-19 commands global attention, it reinforces Ibrahim's message. We have all had a crisis thrust upon us. The crisis is more acute for some than for others. Support is more readily available for some than for others. Every lever of power must be pulled to advance a fair and just response to the pandemic, just as it must with respect to climate change. Fair and just responses require taking into account existing patterns of inequality. While COVID-19 might not have swayed a President Trump-led United States into the fold of advancing climate justice or tackling structural inequality, ⁷⁷ it has spotlighted the relationship between vulnerability, inequality, and disaster from a uniquely universal and inclusive pulpit. We are seeing it at the local level in the United States—in New Orleans and

the fact that the five-year work plan for the WIM includes a focused stream on migration, displacement, and human mobility and the WIM Executive Committee has also been entrusted with overseeing the work of a UNFCCC Task Force on Displacement).

^{74.} See, e.g., Olivia Serdeczny & Manjeet Dhakal, The Warsaw International Mechanism – What Has Happened Until Now and What are the Big Steps, CLIMATE ANALYTICS (March 2016), https://climateanalytics.org/media/wim_march2016_1.pdf [https://perma.cc/56KK-XZAQ].

^{75.} Catherine Benson Wahlen, *AOSIS Chair Urges Increased Focus on Loss and Damage at COP 24*, INT'L INST. FOR SUSTAINABLE DEV. (Nov. 13, 2018), https://sdg.iisd.org/news/aosis-chair-urges-increased-focus-on-loss-and-damage-at-cop-24/ [https://perma.cc/LVS8-YVZJ].

^{76.} *Id*.

^{77.} See generally Cinnamon P. Carlame, U.S. Climate Change Law: A Decade of Flux and an Uncertain Future, 69 Am. U. L. REV. 101 (2019).

the Navajo Nation.⁷⁸ We are seeing it at the global level—for migrant workers⁷⁹ and indigenous communities.⁸⁰

In this moment of collective vulnerability, when the focus is not just on building back but building back better, 81 these lessons should be translated into efforts to rebuild in ways that advance climate action and climate justice. As UN Secretary-General António Guterres underscored, rebuilding stronger in the wake of the pandemic necessitates that "people and their rights must be front and centre. . . . [w]e have seen how the virus does not discriminate, but its impacts do."82 Rebuilding better requires taking climate vulnerability into consideration in all recovery efforts. It requires reinforcing ongoing work on loss and damage that enhances climate action, respects the rights of present and future generations, and "provide[s] the framework for more inclusive and sustainable economies and societies."83 Recovery strategies must mainstream efforts to limit climate change and prioritize the needs of climatically vulnerable communities. These efforts must go hand-in-hand with complementary efforts to disassemble systems that imbed inequalities and which, in turn, exacerbate and are exacerbated by the climate crises.⁸⁴

^{78.} Laurel Morales, *Navajo Nation Sees High Rate of COVID-19 and Contact Tracing is a Challenge*, NPR (Apr. 24, 2020), https://www.npr.org/2020/04/24/842945050/navajo-nation-sees-high-rate-of-covid-19-and-contact-tracing-is-a-challenge [https://perma.cc/7PP6-CN3K].

^{79.} Haris Pullanoor, *The Internal and External Migrants, Together, Pose a Refugee Crisis that India is Ill-prepared for*, QUARTZ INDIA (May 18, 2020), https://qz.com/india/1858209/covid-19-lockdown-exposes-indias-looming-migrant-refugee-crisis/ [https://perma.cc/8EPX-PY5A]; Indulekha Aravind, *Covid-19 Will Have Unprecedented Effect on Migrant Economy: Dilip Ratha, World Bank*, The Econ. TIMES (May 10, 2020), https://economictimes.indiatimes.com/opinion/interviews/covid-19-will-have-unprecedented-effect-on-migrant-economy-dilip-ratha-world-bank/articleshow/75648695.cms?from=mdr [https://perma.cc/4JTK-WWE4].

^{80.} See, e.g., The Impact of COVID-19 in Latin America (The World Bank May 19, 2020), https://www.worldbank.org/en/news/video/2020/05/20/the-impact-of-covid-19-in-latin-america [https://perma.cc/9NQG-F9G5].

^{81.} U.N. Office for Disaster Risk Reduction, *Build Back Better in Recovery, Rehabilitation, and Reconstruction* (2017), https://www.preventionweb.net/files/53213_bbb.pdf [https://perma.cc/4RLN-LXSR].

^{82.} Human Rights 'Uplift Everyone'; Must Guide COVID-19 Recovery Response, Says UN Chief, UN NEWS (Apr. 23, 2020), https://news.un.org/en/story/2020/04/1062442 [https://perma.cc/3Z7V-SF5Z].

^{83.} *Id.* (quoting UN Secretary-General António Guterres).

^{84.} See, e.g., Gerald Torres, Introduction: Understanding Environmental Racism, 63 U. Colo. L. Rev. 839, 840 (1992) (detailing the relationship between environmental law and racism, including, of course, structural racism).

Much of this work rightfully starts at the local and state levels, but loss and damage discussions demand international context and collective response. By its nature, climate change is a collective action problem, and loss and damage injuries are the most acute representation of this. The types of climate harms that fall into this category are urgent, unavoidable, and irreversible. They are borne disproportionately by the most vulnerable and the least culpable communities. The WIM was born out of recognition of the acute equity and justice challenges that these harms represent and the need to direct attention and resources to harms that threaten the lives and livelihoods of millions of people.

As the crest of the pandemic passes, it carries energy that can be harnessed to advance the work that the WIM was created to do. This renewed attention on risk and recovery creates momentum to "[m]ainstream Loss and Damage within broader climate change, disaster risk reduction and sustainable development discussions, policy development and planning." This work can take place within the WIM through, for example, elevating questions of racial and economic inequality across the workstreams identified in the five-year work plan over the 2020-2021 work period. 86

More specifically, this work falls comfortably under the umbrella of The Technical Expert Group on Comprehensive Risk Management (TEG-CRM) for the WIM. The TEG-CRM is tasked with enhancing cooperation and facilitation around efforts to build the long-term resilience of countries and vulnerable populations and communities to loss and damage. This work centers on building resilience in relation to slow and sudden-onset events with a particular focus on finding ways to facilitate communities' efforts to build back better, to develop social safety nets, and to pursue transformational approaches in the wake of slow and sudden-onset events.⁸⁷ In the wake of COVID-19, states and communities worldwide are developing

^{85.} Byrnes & Surminski, *supra* note 70, at 2.

^{86.} See Workplan, supra note 69.

^{87.} Co-Chairs of the U.N. Exec. Comm. of the Warsaw Int'l Mechanism, *Eleventh Meeting of the Executive Committee of the Warsaw International Mechanism for Loss and Damage Associated with Climate Change Impacts Bonn, Germany*, Excom/2020/11/1 (Mar. 3, 2020), https://unfccc.int/sites/default/files/resource/Excom_11_Provisional_agenda_and_annotations.pdf [https://perma.cc/2UNZ-6R77]; *see also TEG-CRM Membership*, U.N., https://unfccc.int/process-and-meetings/bodies/constituted-bodies/executive-committee-of-the-warsaw-international-mechanism-for-loss-and-damage-wim-excom/areas-of-work/comprehensive-risk-management-approaches/technical-expert-group-on-comprehensive-risk-management [https://perma.cc/ZZ62-UFWZ] (last visited Dec. 11, 2020).

recovery and rehabilitation plans that focus on building back in ways that are sustainable and transformational. COVID-19 recovery and rehabilitation will shape social resilience in ways that directly and indirectly implicate the work that the TEG-CRM is trying to advance.

Over the 2019-2021 period, for example, one of the priority areas for the work of the TEG-CRM includes developing guidance for designing and implementing country-specific risk profiles, risk assessments and risk management strategies. ROVID-19 reshapes how communities from the local to the global level undertake risk assessment. In the post-COVID-19 world, the risk assessment work that the TEG-CRM is tasked with advancing must be responsive to the emerging COVID-19 lessons, including the critical lessons on the relationship between disaster and inequality. Finding ways to deepen the work of the TEG-CRM around these intersecting disaster-equity conversations and, in turn, to translate this work into state-based COVID-19 recovery strategies, creates challenging yet unprecedented opportunities to mainstream loss and damage considerations into larger state-based conversations around both disaster-recovery and long-term social and economic stability.

For too long, questions of loss and damage have been bracketed due to the seemingly intractable questions of liability and compensation that they raise. But the pandemic is centering questions about vulnerability, inclusivity, and equity in such a way as to create space to move discussions of loss and damage from the margins of climate law to the forefront of conversations about disaster preparedness, response, and recovery.

V. CONCLUSION

At the time of writing, it is early 2021. COVID-19 cases worldwide exceed a hundred million. ⁸⁹ Deaths worldwide have surpassed two million. ⁹⁰ These figures only reflect the cases that we know about and the deaths that we have counted. Cases continue to climb globally. All the while, the streets of the United States are afire in protests over systemic racial injustice and police brutality. All of this is the context within which efforts to contain and respond to the harms of climate change exist.

It has been twenty-nine years since Vanuatu flagged the urgent need for an equity-based system for responding to unavoidable and irreversible

^{88.} See Workplan, supra note 69, at 10.

^{89.} John Hopkins, *COVID-19 Dashboard by the Center for Systems Science and Engineering at John Hopkins University*, CORONA VIRUS RESOURCE CENTER (Feb. 8, 2021), https://coronavirus.jhu.edu/map.html [https://perma.cc/2DCJ-5ABJ].

^{90.} Id

climate harms, and twenty-eight years since the parties to the UNFCCC came together and committed to "prevent[ing] dangerous anthropogenic interference with the climate system." Yet all these years later, climate responses remain deficient across the board. Climate change mitigation, adaptation, finance, and loss and damage strategies all remain inadequate to address the growing crises. The risks of these combined failures were evident before 2020. COVID-19 has simply taught us more about how precarious we all are and how disaster streams along existing pathways of inequality, deepening those inequalities as it flows.

The bully pulpit of the COVID-19 pandemic is as powerful as the disease is destructive. Even as COVID-19 has wreaked devastation, it has exposed the dangers at the disaster-inequality intersection and mobilized efforts to examine how inequality is inflamed in moments of crisis or, as the case will be, in the decades of climate crisis to come. When the pandemic wanes and we regain our ability to focus, we must turn our attention back to climate change. Anthropogenic climate change is the most profound threat facing humanity, but it is not one discrete threat, or one impending disaster. Climate change will lead to a series of changes, challenges, and crises the nature, scale, and distribution of which will be determined by human decisions—decisions as to how to address climate change directly and decisions about how to address the structural inequalities that create the context within which anthropogenic climate change manifests. If we hope to avert a spiraling climate crisis and advance efforts to transition justly to a low carbon economy, we must heed the lessons that the pandemic is teaching us.