

# Advancing Climate Justice and the Right to Health Through Procedural Rights

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## Abstract

Scholars have increasingly recognized the ways in which climate change threatens the human rights of people around the world, with a disproportionate burden on the rights of already vulnerable persons. At particular risk to these populations is the right to health, as well as to interconnected human rights. Yet, scholars have generally not provided a thorough assessment of precisely how human rights law can catalyze a response to climate change to effectively avert health harms. This article suggests that human rights law is better suited to guide procedural responses to climate change and its health harms than it is to guide substantive decision-making. This article describes the ways in which climate change implicates the right to health and then analyzes human rights law's response. While acknowledging the intrinsic value of human rights in prompting climate change action, the article focuses its analysis on human rights' instrumental value in this arena.

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## Introduction

WHAT ROLE DOES human rights law play in responding to climate change? In recent years, scholars and others in the international community have used increasingly powerful rhetoric to articulate the human rights imperative of climate change.<sup>1</sup> The Intergovernmental Panel on Climate Change (IPCC)—a scientific body established to assess the risk of climate change—released its fifth report, concluding that global warming is “unequivocal” and “unprecedented.”<sup>2</sup> The impacts of climate change on human health are increasingly evident. As demonstrated in recent years, climate change poses enormous risks to the health, well-being, and livelihood of the world’s citizens, and in particular those citizens who already suffer disadvantages of discrimination, poverty, and broader marginalization within their communities and society. The World Health Organization (WHO) reports that climate change will cost health sectors around the world an estimated \$2-4 billion a year by the year 2030. Further, climate change will exacerbate existing climate-sensitive illnesses, including diarrheal diseases, malnutrition, malaria, and dengue.<sup>3</sup> These statistics reflect a brewing international crisis, particularly for those communities least equipped to respond. It is increasingly evident that governments will need to not only work to mitigate climate change by reducing greenhouse gas emissions; they will also need to partner with the private sector and communities to adapt to climate change and reduce its toll on human health and well-being.<sup>4</sup> This Journal’s critical examination of climate justice in the current issue provides an important and timely reminder of the challenges at hand.

As we engage in these debates, it remains important to analyze exactly what we mean by human rights, as well as how human rights can respond to climate change and its health-related harms. By human rights, do we mean moral claims, or rather rights that arise from national and international legal obligations, or perhaps both? While there may be intrinsic value in framing climate change and its

related health consequences as moral concerns, it is equally important to consider how human rights can serve as instrumental legal tools in prompting change. This article offers a reminder of and reflection on the often-precarious relationship between human rights and climate change, before suggesting more constructive ways in which human rights can help with climate change response. The article first focuses on human rights as legal obligations, demonstrating that they may have limited value in guiding substantive decision making around climate change for several reasons. Responding to and working to avert climate change-induced health harms are challenging endeavors; they require thoughtful, iterative planning that considers a variety of interests and probabilistic events. Human rights law may be ill-suited to offer substantive guidance in these governance decisions. As a threshold matter, the temporal complexities and uncertainties inherent in climate change complicate decision-making around preventative steps, even in the context of well-intentioned and well-funded actors. Clear cases of rights violations by state actors—for example, a government having knowledge of an impending levy failure and yet failing to act, despite the ability to do so—are rare. In fact, the vast majority of rights violations have murky legal accountability lines (both vertically to state actors and diagonally to those beyond), thereby constraining the efficacy of human rights as an enforcement and deterrence tool. Many rights themselves lack determinate content.

Moreover, in the context of climate change, there is a great risk of competing rights claims that obfuscate a clear “human rights response” that the law unequivocally supports. For instance, adaptation efforts may point to population control, relocating communities from vulnerable geographical areas, or requiring communities to change their dietary habits to rely on more climate change-resistant crops. These endeavors raise their own set of rights concerns, particularly when considering social,

economic, and cultural rights. Human rights law provides limited guidance regarding which rights trump and how to balance competing needs. Even more fundamentally, most rights violations are construed *ex post* (after rights have been violated), while climate change adaptation requires thoughtful *ex ante* decision making (before further climate change events and related rights violations take place) to save lives and protect health.

Despite these substantive challenges, this article will explore how human rights procedures—including those grounded in law under the Aarhus Convention, and related norms encompassed in human rights-based approaches—offer governance solutions to climate change-related health harms. Such procedures include information-sharing, grievance redress mechanisms to adjudicate disputes, and the active participation of various participants including rights-holders in decision making. These procedures can help guide iterative, participatory, and accountable solutions, offering an avenue for equitable decision making, including over rights conflicts. This article offers a lens into how human rights legal principles versus human rights norms can frame governments' procedural response to the concerns introduced by climate change.

### Climate change and the human right to health

The evidence linking climate change with health harms continues to mount. It is increasingly clear that climate change is altering the conditions underlying a series of physical, biological, and chemical processes that support human life on earth.<sup>5</sup> Climate change impacts various pre-determinants of health, including clean air, safe drinking water, available sanitation services, sufficient food, and secure shelter. Climate change's anticipated impact on nutrition is particularly severe, with rising atmospheric temperatures and variable precipitation expected to decrease the production of staple crops in some African countries by up to 50% by the year 2020.<sup>6</sup> And climate change will impact other pre-conditions of health including air quality; higher air temperatures associated with climate change increase the risk of illness and death from cardiovas-

cular and respiratory disease, particularly among elderly persons.<sup>7</sup> Add to these higher temperatures the fact that urban air pollution and pollen and aero-allergen levels increase with climate change, also exacerbating respiratory illnesses. Urban air pollution alone causes an estimated 1.2 million deaths each year.<sup>8</sup>

Climate change also impacts rainfall patterns and natural disasters, with potentially adverse consequences for access to safe water, adequate food, housing, medical care, and security, not to mention lives. The number of global weather-related natural disasters has more than tripled in the past four decades, with an estimated 60,000 disaster-related deaths occurring each year. Developing countries have borne the overwhelming burden of deaths and adverse health consequences in these disasters.<sup>9</sup> Climate change will also affect patterns of infection, particularly for water-borne diseases and diseases transmitted through insects, snails, or other cold blooded animals.<sup>10</sup> Malaria and dengue are strongly influenced by climatic conditions. One set of studies predicted that climate change could expose an additional 2 billion persons to dengue by the 2080s.<sup>11</sup>

Notably, the impacts of climate change on the health of populations will not be uniform. Some climate change "winners" may emerge, particularly in the short- to medium-term.<sup>12</sup> Global warming may bring localized benefits, including fewer winter deaths in temperate climates and increased food production. Yet, the aggregate long-term effects of climate change will likely be overwhelmingly negative from a health perspective, particularly for populations living in small island developing states and other coastal regions, as well as for children, the elderly, and those groups vulnerable to health risks.<sup>13</sup> Communities that already have weak health infrastructure will be the least resilient in responding to and coping with climate change-related health events.

In reaction to this crisis, scholars and practitioners have increasingly incorporated the language of human rights into discussions of climate change. While the primary United Nations international human rights treaties do not provide for an express legal right to a healthy and safe environment, the

treaty bodies that monitor states' compliance with these treaties have recognized an intrinsic connection between protecting the environment from climate change and fulfilling a range of human rights.<sup>14</sup> As a 2009 United Nations Human Rights Council resolution explained:

Climate change-related impacts have a range of implications, both direct and indirect, for the effective enjoyment of human rights including, *inter alia*, the right to life, the right to adequate food, the right to the highest attainable standard of health, the right to adequate housing, the right to self-determination and human rights obligations related to access to safe drinking water and sanitation.<sup>15</sup>

Increasingly, such rights discourse pervades discussions of climate change response.

Advocates who have invoked the language of human rights in assessing climate change have, in part, characterized the need to respond to climate change as a moral imperative. These advocates have raised the pressure on countries and citizens to act by appealing to the intrinsic value of human rights and the corresponding need to fulfill those rights. As Amartya Sen has argued, "human rights can be seen as primarily ethical demands" for citizens and governments to act.<sup>16</sup> Countries and citizens, in this account, must take action in order to avert further harms and rights violations. This moral invocation can be valuable if it mobilizes wealthier parties, including privileged citizens within developing countries, to direct more resources to climate change response and to tackle corresponding health harms. Human rights may thus demand a restructuring of the international aid architecture, suggesting that wealthier governments and persons should more comprehensively, equitably, and efficiently direct resources to these endeavors. Over time, these reflections and debates may change interests and preferences in such a way that governments and individuals increasingly embrace human rights norms themselves.<sup>17</sup>

Beyond appealing to the intrinsic values underlying human rights to prompt action, however,

advocates have dedicated less attention to addressing how human rights, as a set of legal obligations grounded in international and national law, direct climate change action. Doing so is relevant because human rights, beyond serving as moral instruments, are legal instruments that carry the force of law.<sup>18</sup> Human rights-based legal claims can harness resources and direct government action in response to climate change. Understanding how human rights law directs action is thus of paramount importance in the climate justice conversation.

### Human rights as substantive response to climate change

The question of how human rights legally direct action is a challenging and highly complex one. The underlying legal rights are often vague, the legal claims limited in their scope and potential efficacy. Human rights claims generally require an *ex post* (after the harm has taken place) showing of a government's action or inaction that caused a particular harm. It is generally difficult, if not impossible, to make such a showing in the context of climate change.<sup>19</sup> Moreover, a government's actions must be evaluated in the context of temporal complexities, uncertainty, and oftentimes competing human rights claims. This section analyzes these complexities in leveraging human rights to resolve substantive rights claims around climate change.

First, many human rights—and socioeconomic rights in particular—contain amorphous content. The right to health provides a compelling example of this. While health was historically regarded as falling within the private rather than the public sphere, health gained recognition as a public, social issue with the establishment of WHO in 1946. WHO developed an expansive definition of health as encompassing "complete physical, mental and social well-being and not merely the absence of disease or infirmity."<sup>20</sup> WHO's Constitution, in turn, established the "highest attainable standard of health" as a "fundamental right." Over time, this articulation has been incorporated into various international and regional human rights instruments, including the International Covenant on Economic, Social,

and Cultural Rights (ICESCR) and the African Charter on Human and Peoples' Rights. The right to health, in turn, has been interpreted and given further meaning by various human rights courts, international treaty bodies, tribunals, and technical experts.

Nonetheless, many indeterminacies remain. Notably, the framing of a fundamental right to the "highest attainable standard of health" implicitly acknowledges that many developing countries will not be able to provide comprehensive health care for all of their citizens, making those countries' immediate- and longer-term obligations imprecise.<sup>21</sup> The right to health, under this construction, varies by context and what is possible or attainable in a certain time and place. Debates over the content of the minimum core content of the right to health have similarly struggled to provide certainty and have indicated that the minimum core, or "minimum floor" of the right, may vary by context and what is possible in a particular space.<sup>22</sup> As a consequence, the very content of the right to health is largely indeterminate, making human rights litigation around such a right a highly complex endeavor. While courts and expert bodies have helped resolve some of the inherent complexities, many remain. This indeterminacy also complicates climate change-related health decision making. What, for example, does the human right to health require when we are considering the design of temporary housing facilities for persons displaced due to climate change-related catastrophes? How should the state prioritize emergency response systems or adaptive measures in order to best avert violations of the right to health? These questions defy simple "right to health"-based answers.

On top of this, it is often difficult to establish responsibility for violating a right. As a threshold matter, human rights pertain to states. State governments commit to international, regional, and/or domestic human rights principles, and consequently all legal claims must be framed by reference to states' actions or inactions. Furthermore, legal proof of causation poses additional hurdles, with litigants or tribunals needing to prove that a particular state action or inaction caused the particu-

lar human rights harm.<sup>23</sup> Lines of responsibility in climate justice oftentimes do not map neatly onto this state actor requirement. Private multinational corporations working across state boundaries play a significant role in contributing to greenhouse gas emissions. Non-state societal actors may strongly influence the capacity to realize rights, but elude state control and, thus, escape the ambit of formal human rights law.<sup>24</sup> And given that climate change represents the aggregate effects of human activities across countries, civilizations, and centuries, it may be virtually impossible to establish that a particular state's action or inaction specifically caused a particular climate change-induced human rights violation.<sup>25</sup>

Instead, most climate change-related challenges are likely to be complex and to involve many governmental and non-governmental actors. The Kyoto Protocol and other international climate change negotiations have grappled with the extensive international coordination that is necessary to attribute responsibility for and respond to climate change.

As a legal matter, it is quite difficult to attribute specific climate change events—typhoons, hurricanes, floods, droughts, or otherwise—to particular states' actions or inactions. Relief efforts in developing countries have most frequently invoked moral considerations in order to prompt developed country action. And lastly, even where such constructions are possible (that is, even where it is possible to establish state causation that triggered a particular human rights harm) those constructions would typically be made *ex post*. This final limitation is particularly damaging given that the goal of a human rights-compelled response to climate change and its corresponding health harms is to act now to avert further damage to health and livelihoods.

Beyond these constructivist challenges, even well-resourced and -intentioned governments may understandably struggle in deciding which governance actions to take in response to climate change. Their decisions are made in the context of uncertainty—despite many scientific advances, we lack firm knowledge of how much climate change is taking place or on what time horizon. The IPCC's expert scientific estimates of climate change are

framed as probabilistic assessments, with varying qualitative levels of confidence.<sup>26</sup> Scientists and experts are certainly becoming far more advanced in their assessments, with positive impacts for proactive planning; yet, we still lack definitive facts about climate change—its scope or progression.

Further, we do not know exactly how climate change will impact health and livelihood across contexts. When will the next natural disaster take place? Which country and citizens will it impact the most, and in what ways? We do not know the direction, magnitude, or target of the next big storm, making it difficult to plan in advance to avert rights violations. By way of example, post-tropical cyclone Sandy was the second costliest storm in US history, causing more than 250 deaths and costing New York State alone more than \$41.9 billion. In the context of Sandy, there is the rare but fortunate circumstance of federal, state, and local government actors who are equipped to act to avert future harms. But which harms? Does this mean that New York, as part of its human rights response, should invest in storm walls, additional temporary shelters, or robust backup generators to ensure that the lights do not go out at hospitals? Scientists have estimated that the New York tri-state areas will experience Sandy's particularly powerful trajectory once in every 700 years.<sup>27</sup> How should the government and broader community prepare for the next storm? Climate change responses also may have temporal complexities, with present-day best practices in terms of environmental impact, equity, and cost-effectiveness running contrary to best practices as defined several decades from now.<sup>28</sup> Governments will need to make complex decisions about whether to invest in expensive, long-term infrastructure given the evolving knowledge and technology surrounding climate change response.<sup>29</sup> At the end of the day, human rights do not provide rich substantive guidance on what decisions governments should make to minimize harms.

Finally, even beneficent climate change actors will likely confront a range of competing rights claims. Various climate change responses to avert human rights harms may raise their own set of hu-

man rights concerns. For example, scientists have identified cassava as the “Rambo” of staple crops, given that it thrives in hotter climates and can grow without water.<sup>30</sup> What if climate change response forces communities to change their diets and relinquish crops that have been an integral part of their cultural traditions? In this example, protecting the rights to health and food may infringe communities' and individuals' cultural rights and rights to self-determination. What if a state relocates a particular community from a low-lying area, while it builds a storm wall to protect another community from the possibility of flooding and storm surge? In a more extreme but not at all unrealistic example raised by Robin Kundis Craig, what if one of the most successful climate change mitigation and adaptation strategies is to institute population control policies?<sup>31</sup> With population control, both greenhouse gas emissions and pollution would likely stabilize or decrease, even if standards of living continued to increase.<sup>32</sup> Demands for energy, natural resources, and pre-determinants of health would decrease, and states could better target resources and meet food, security, water, housing, and other health and health-related needs.<sup>33</sup> Fewer populations would need to be displaced, and there would be more room in other nations and communities to accommodate relocated groups.<sup>34</sup> How the state makes these decisions and which communities are impacted will raise a series of rights concerns. Indeed, states may confront significant human rights opposition to their human rights-motivated activities. While international treaties have recognized that human rights are necessarily interdependent and interrelated, they have not fully grappled with the ways in which certain rights may conflict and complicate decisions.

And lastly, there may be circumstances in which human rights and other legal rights conflict with notions of justice underlying the climate justice conversation. The term justice is itself imprecise and has varying content and philosophical underpinnings, depending upon the term's user and audience. Scholars in legal and political theory have used the term to describe and critique a variety of distri-

butional relationships involving government and private actors.<sup>35</sup> Famously, John Rawls has espoused that in a just world, social and economic inequalities should be arranged to most greatly benefit those who are least advantaged.<sup>36</sup> This article invokes this Rawlsian framing and describes climate justice in light of these principles. A socially just society, in this account, understands and promotes equality by considering how to rearrange inequalities and thereby benefit those persons who are most marginalized. The United Nations report “Social justice in an open world: The role of the United Nations” provides, “Social justice may be broadly understood as the fair and compassionate distribution of the fruits of economic growth.”<sup>37</sup>

These broader principles of social justice, only briefly outlined herein, may conflict with legal claims of right. For example, developing countries’ citizens often enter into contracts with corporations that bargain away land or natural resource rights. Those contracts are grounded in law and establish legal claims of right for both parties to the transaction. And yet we might be skeptical of those contracts from a justice perspective, based on unequal bargaining power, general social and economic status of the bargaining parties, or consequences for third parties who are not party to the transaction. In another example, socioeconomic rights, including the right to health, contain attendant legal commitments to “progressive realization” and “non-retrogression.”<sup>38</sup> While a state must allocate resources to progressively realize socioeconomic rights, the state must also ensure that the rest of the rights maintain at least their initial level of realization.<sup>39</sup> However, in highly unequal countries and in the context of limited state resources, a justice-oriented response to climate change in an effort to advance health might require stripping wealthier groups of certain levels of rights in order to meet the needs of un- or under-served populations. Meeting the health needs of the most disadvantaged members of society, who likely also bear the disproportionate burden of climate change, might mean rolling back or de-prioritizing certain health services for affluent persons. In other words, social justice often points to redis-

tribution of rights and resources, which may run counter to certain legal rights, particularly those that attach to more powerful persons or entities.

### Human rights and procedural rights in the climate change conversation

Human rights law, thus, frequently cannot resolve the complex problems and tradeoffs that emerge in climate change planning. Policy makers will often have to balance competing rights and interests in order to arrive at a “second best” answer in a world of limited resources, uncertainty, and temporal change. Nonetheless, those policy makers will have to design a system of procedures to guide their substantive decision-making. Human rights law, and the norms surrounding human rights based approaches, offer guidance in that endeavor. Indeed, among the strongest benefits of law as a form of social order is that it offers predictable procedures for sharing information and navigating disputes.

First, human rights law itself advances procedural principles relevant to environmental decision-making, including on climate change. Indeed, procedural rights are firmly rooted in international human rights instruments like the International Covenant on Civil and Political Rights and, significantly, in the Aarhus Convention of 1998, as well as in domestic law in various countries. The United Nations Economic Commission for Europe Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (the “Aarhus Convention”) guarantees citizens basic procedural rights with regard to environmental protection. Signatory states are required under the convention to domesticate three procedural pillars into their domestic system of laws: (1) access to information regarding the environment, (2) public participation in decision making, and (3) access to judicial or administrative recourse.

The Aarhus Convention proceduralizes environmental regulation in an innovative manner. It presumes that improved access to information and public participation in environmental decision-making will result in enhanced public awareness, commu-

nication with decision makers, and public accountability.<sup>40</sup> While this presumption has been subject to academic debate, a growing body of empirical evidence lends it support. Despite the noted limitations of the Convention, namely the restriction of duties to state actors and the ample room for state actor discretion in interpreting duties, many regard the legal agreement as a landmark document; it enshrines powerful procedural requirements to facilitate inclusive and transparent environmental deliberation.<sup>41</sup> It has had spillover effects. The EU has started applying similar procedural principles in its environmental legislation, mandating for access to judicial or administrative recourse avenues.<sup>42</sup>

Beyond this positive law on procedural requirements, human rights law offers additional insights into how governments should engage in climate change decision-making. What are these insights? Scholars have widely discussed employing human rights-based approaches to address various development challenges. Human rights-based approaches are distinct from claims, as under the Aarhus Convention, grounded in positive law. While the meaning of the term human rights-based approach varies by context and user, such approaches are moralistically grounded.<sup>43</sup> For the purposes of this discussion, a human rights-based approach is a conceptual framework for decision making that is normatively grounded in international human rights principles. The approach focuses not only on substantive outcomes and promoting and protecting human rights; it also closely investigates the processes that underlie human rights-related decision making.

The approach draws on normative principles within human rights in order to clarify equitable procedures for resolving governance questions and contests around rights. It does not limit itself to duties grounded in substantive law. Rather, it asks which types of processes advance voice and agency on the part of persons most likely to be directly impacted by decision-making. As Amartya Sen has explained, “a theory of human rights cannot be sensibly confined within the juridical model within which it is frequently incarcerated. For example, public recognition and agitation can be part of the

obligations... generated by the acknowledgement of human rights.”<sup>44</sup> In this sense, individuals and communities suffering from impending or current rights violations have choices, and a human rights approach should advance their agency and participation in making those choices.<sup>45</sup> It should also guide the selection and duties of third-party agents who represent individuals or communities in decision-making processes, ensuring that they serve the needs and interests of those beneficiaries. Human rights’ normative principles—including participation, accountability, and non-discrimination—can play a formative role in designing climate change responses.

With respect to participation, a human rights-based approach enlists individual and community input to help shape climate change policy. As in the legal requirements under the Aarhus Convention, individuals and communities should actively, freely, and meaningfully participate in decisions that affect their human rights. These include the selection, design, implementation, and monitoring of climate justice projects.<sup>46</sup> Town hall meetings and public radio are just two of myriad forums that can creatively promote local engagement with decision making. By increasing the number of voices involved in decision making, governments can allow for more inclusive and proactive development of policies.<sup>47</sup> The voices of the persons most likely to be directly impacted by policy choices—oftentimes the persons most marginalized in discussions—should carry weight and guide more equitable policies. Information sharing is another important component of participatory processes.<sup>48</sup> After all, meaningful participation is only possible where actors are empowered with adequate information to have voice in decision making. President Barack Obama has emphasized the importance of such information dissemination in recent months, creating a new website to distribute information to communities, researchers, and industries working to adapt to climate change. Under his initiative, large data sets regularly collected by NASA, NOAA, and other federal agencies will become available to the public, allowing for better planning around issues like sea level rise and food production.<sup>49</sup> Aside from web-



based platforms for disseminating information, community report cards and scorecards are an increasingly popular development tool to share (and source) information on government's performance. These scorecards, like any information dissemination initiative, should reflect the skills, knowledge, and needs of the communities in which they are employed.

Social mobilization also plays a key role in advancing individual and community agency in the dialogue. Community members should actively engage in the iterative articulation of policy-making, either directly or through representatives who reflect their desires. As the Human Rights Council has recognized, such inclusive efforts can improve the quality and effectiveness of substantive decision making in this space.<sup>50</sup> Indeed, in the presence of limited financial resources, policy makers will have to make difficult choices about climate justice programming. Particular communities may be targeted to directly or indirectly benefit from climate change action; others may be targeted to directly or indirectly bear costs of climate change action; and still others may be targeted to receive both costs and benefits of action. No doubt the classification of these “winners” and “losers” will be, at least in part, socially constructed, and the law will assign rights and duties in a corresponding manner.<sup>51</sup> For example, governments may have to grapple with contentious issues such as population growth, relocation, crop prioritization, and other policies that incentivize particular behaviors. These policies and decisions will often be contested and political in nature, the results significant for affected individuals and communities. Legal rights will oftentimes conflict and require policy makers to balance competing claims. And no doubt there will be second order questions about whose voices to privilege to ensure equitable outcomes, how to privilege them, and which processes to employ in order to achieve more equitable, accountable results. Should decisions be made by simple majority vote, or should certain marginalized voices be favored? What legal duties attach to agents or elected representatives that serve the interests of particular constituents? These questions should be at the center of the climate justice

discussion. The answers to these questions will legitimate certain decisions as being both consistent with human rights law and enacted through a set of procedures that are also normatively aligned with human rights principles.

Further, a human rights-based approach to climate justice should emphasize government accountability and systems for the redress of alleged rights violations. In this respect, the approach again aligns with the legally enshrined Aarhus Convention principles. It also suggests that states should consider providing a spectrum of accountability-promoting activities, depending upon local context. These include public forums for debate, citizens' charters, and grievance redress mechanisms such as litigation to adjudicate contests around individual or community rights.<sup>52</sup> The appropriate public forums will depend upon local capacity and awareness. Legal agents might be necessary in contexts of dramatic power imbalances, such as when a community is contesting the actions of a government-supported polluting factory.

A human rights-based approach has flexibility to more expansively consider the terrain of duty-bearers who implicate climate justice. Unlike in the Aarhus Convention, these human rights-based accountability mechanisms need not only target state behavior. Private actors play a powerful role in climate change response. Not only do they contribute to greenhouse gas emissions, in a more constructive light a variety of private actors are involving in preparing communities to be more resilient to climate change. Access to finance and technology will be imperative for communities and localities adapting to climate change, and the private sector plays a key role in facilitating such access. A human rights-based approach can include these private actors in ways that formalistic human rights law cannot. It can also seek to build public-private and citizen-state partnerships in ways that more formalistic—and often more adversarial—human rights law cannot.

Notably, these espoused procedural principles generally will not provide substantive solutions to climate change questions. In this sense, we might reconceive of the human rights-based response to

climate change as one that suggests locally appropriate procedures for deliberating over and adjudicating climate change policy decisions. In turn, we might evaluate substantive decisions in light of the procedures that accompany them and whether those procedures align with human rights principles. Over time substantive decision-making across spaces may converge in certain ways and allow for shared learning.

## Conclusion

Advocates, policy makers, and community members have increasingly leveraged the language of human rights in climate change discussions. In doing so, they have recognized the links between climate change and a host of potential legal rights deprivations, including those related to health. These types of conversations, continued in this important volume, have highlighted the linkages between climate change and basic rights. The conversations often affirm the moral harms of climate change and of intransigence in this area. Wealthier states and persons who have often contributed the most to climate change may be encouraged to respond to climate change through such powers of moral persuasion.

Yet, human rights law offers more than moral rhetoric. It holds instrumental value as a source of positive law, backed by a series of adjudicative mechanisms for litigating or otherwise holding duty bearers to account. This article has argued that we need to be more discerning in addressing how human rights operate as legal instruments (grounded in national and international law) to address climate change and related health harms. It offers a critique of using human rights law to resolve substantive claims over rights violations stemming from climate change action or inaction. Nonetheless, human rights law contains procedural commitments, as enshrined in the Aarhus Convention. Human rights-based approaches, distinct from formal human rights law, separately embrace normative commitments that may guide procedures for decision-making in this space. Participation, information sharing, and access to grievance mechanisms emerge as paramount in this procedural frame-

work. They are important preconditions to inclusive and deliberative decision-making, even in the face of thorny questions of substantive law. In this sense, human rights may gesture towards a system of procedural justice that undergirds more equitable and responsive climate change decision-making.

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