
HUMAN RIGHTS PRINCIPLES AND CLIMATE CHANGE

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1. Introduction
 2. Does Climate Change Interfere with the Enjoyment of Human Rights?
 3. How Does Human Rights Law Require States to Address Climate Change?
 4. Conclusion
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1. INTRODUCTION

THIS chapter examines the application of international human rights law to climate change. Specifically, it looks at whether climate change interferes with the enjoyment of human rights recognized in international law and, if so, whether and how human rights law requires States to protect human rights from such interference.

Two points should be emphasized at the outset. First, this chapter examines principles of human rights law, not morality or ethics.ⁱ Of course, the seminal documents in international human rights law, especially the 1948 Universal Declaration of Human Rights, can also be read as statements of shared ethical principles. But legal norms differ from ethical principles in key respects. Even if human rights law often seems to be honored more in the breach than the observance, it still has claims to *bindingness*: it is set forth in treaties with which States have formally agreed to comply,ⁱⁱ and it is overseen by compliance mechanisms. Although those mechanisms are very far from completely effective, they may have concrete effects on behavior. At the same time, human rights law includes limits that may not exist in morality or ethics. For example, human rights treaties impose obligations primarily on States, not individuals or other non-State actors such as corporations, and they often provide that a State owes duties only to individuals within its jurisdiction or control.

Second, the application of human rights law to climate change is still in its infancy. Human rights treaties do not address climate change explicitly, and climate treaties do not refer to human rights. The most famous attempt to bring a climate claim to a human rights tribunal – the petition brought by the Inuit people to the Inter-American Human Rights Commission – failed to obtain a decision on the merits.

Nevertheless, the contours of the relationship between human rights and climate change are becoming clearer, as this chapter explains. Although human rights courts have not addressed climate change, other human rights bodies, including the UN Human Rights Council and the UN Office of the High Commissioner for Human Rights (OHCHR), have examined the relationship,

as have scholars (United Nations General Assembly, 2009; OHCHR, 2009a).ⁱⁱⁱ Perhaps most importantly, human rights tribunals and other bodies have developed a large and growing body of jurisprudence on the application of human rights norms to environmental harm generally. The principles of this emerging environmental human rights law have become much clearer in recent years, and it is possible to apply them to the enormous environmental challenge of climate change.

2. DOES CLIMATE CHANGE INTERFERE WITH THE ENJOYMENT OF HUMAN RIGHTS?

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Whether climate change interferes with the enjoyment of human rights is a separate question from whether climate change violates human rights law. Interference may be necessary for violation, but it is not sufficient. Whether climate change violates human rights law – or, more accurately, whether States violate human rights law as a result of their action (or inaction) relating to climate change – depends on whether States breach their legal obligations by failing to take steps to prevent or respond to the effects of climate change on human rights. That issue is addressed in the next section. This section focuses on the preliminary question: whether the effects of climate change interfere with the full enjoyment of human rights. The answer seems clear: there is widespread agreement among human rights bodies, States, and scholars that climate change does interfere with the enjoyment of human rights protected by international law, and that this interference will greatly increase over time unless current climate policy dramatically changes.

Human rights are often divided into civil and political rights on the one hand and economic, social, and cultural rights on the other. The former group includes rights to life, liberty, property, and freedoms of expression and religion; the latter includes rights to education, work, social security, an adequate standard of living, and the highest attainable standard of health. The Universal Declaration includes both sets of rights, but when the rights in the Declaration were written into treaties, they were separated into an International Covenant on Civil and Political Rights (ICCPR) and an International Covenant on Economic, Social and Cultural Rights (ICESCR) (OHCHR, 1966a; OHCHR, 1966b). This division also appears in the European and Inter-American regional human rights regimes,^{iv} although the African and Arab human rights agreements incorporate both types of rights without distinction (Organization of African Unity, 1981; League of Arab States, 2004).

Another category of rights, which cuts across the first two, includes rights held by individuals because of their status as members of certain groups, as well as rights held by groups themselves. Both the ICCPR and the ICESCR, as well as regional human rights treaties, prohibit discrimination against individuals on the basis of race, gender, and religion, among other grounds (OHCHR, 1966a; OHCHR, 1966b; Organization of African Unity, 1981; League of Arab States, 2004).^v In addition, the members of some groups enjoy additional rights aimed at enabling the groups' continued existence (OHCHR 1966a).^{vi} Finally, groups that qualify as "peoples" have a few separately recognized rights, notably the right to self-determination (OHCHR, 1966a; OHCHR, 1966b; Organization of African Unity, 1981).

None of the UN human rights treaties explicitly includes a right to a healthy environment or any other right to an environment of a certain quality. The lack of such a right appears increasingly anomalous when compared to the growing popularity of a right to a healthy

environment at the regional^{vii} and national^{viii} levels. However, the absence of a universally acknowledged right to a healthy environment is of less importance to the application of human rights law to the environment than it may first appear, because it is now well established that environmental harm can interfere with the enjoyment of many recognized human rights, including the rights to life and health.

A few treaties make this link explicit. For example, the Convention on the Rights of the Child states that environmental pollution poses “dangers and risks” to nutritious foods and clean drinking water, which Parties are required to take appropriate measures to provide in the course of pursuing full implementation of the right of the child to the highest attainable standard of health (UNGA, 1989). Similarly, the ICESCR provides that the steps Parties must take to achieve the full realization of the right to health “shall include those necessary for ... the improvement of all aspects of environmental and industrial hygiene” (OHCHR, 1966b).

In other cases, the relationship between environmental harm and human rights has been clarified by international human rights bodies. The principal UN human rights organ, the Human Rights Council, appoints special rapporteurs and independent experts who issue reports addressing compliance with particular rights, and the two Human Rights Covenants, as well as other UN human rights treaties, have committees of independent experts with the authority to review reports by States on their implementation of the treaties and to hear claims by individuals against States that have accepted the committees’ jurisdiction over such claims. Statements by the Council-appointed experts and the human rights treaty bodies are not legally binding, although they may have persuasive effect. At the regional level, the African, European, and Inter-American human rights systems have established international courts whose decisions bind States subject to their jurisdiction.^{ix} In addition, the African and Inter-American systems have human rights commissions that can issue non-binding decisions against States in their respective regions, whether or not the States are subject to the jurisdiction of the regional court.

These human rights bodies have consistently stated that environmental harm can adversely affect the enjoyment of the human rights within their purview. For example, the Committee on Economic, Social and Cultural Rights, the committee of experts overseeing the ICESCR, has interpreted the right to health to include:

the requirement to ensure an adequate supply of safe and potable water and basic sanitation; [and] the prevention and reduction of the population’s exposure to harmful substances such as radiation and harmful chemicals or other detrimental environmental conditions that directly or indirectly impact upon human health. (Committee on Economic, Social and Cultural Rights, 2000).

Special rapporteurs appointed by the Human Rights Council have highlighted the adverse effects environmental degradation can have on rights within their purview, including rights to health, adequate housing, and food (UNCHR, 2007; UNCHR, 2002; UNCHR, 2009a; UNCHR, 2012a). The special rapporteur on toxic waste has issued a series of reports identifying how illegal dumping of such waste can interfere with many rights, including rights to life and health (UNCHR, 2001).^x And the regional human rights systems have issued decisions holding that environmental harm can interfere with a broad array of rights, including rights to life, property, health, and respect for private and family life.^{xi}

In recent years, the Human Rights Council has taken note of this emerging environmental human rights law. In March 2011, it adopted a resolution stating that “environmental damage can have negative implications, both direct and indirect, for the effective enjoyment of human rights” (UNGA, 2011). The following year, it appointed an independent expert on human rights and the

environment to a three-year mandate in order, *inter alia*, to clarify the human rights obligations relating to the environment. The present author was appointed in July 2012 to that position. In his first report, presented to the Council in March 2013, he concluded that one of the “firmly established” aspects of the relationship between human rights and the environment is that “environmental degradation can and does adversely affect the enjoyment of a broad range of human rights, including rights to life, health, food and water” (UNCHR, 2012b). The following year, his second report surveyed statements by treaty bodies, special rapporteurs, regional human rights tribunals, and many other sources, and concluded that “[v]irtually every source reviewed identifies rights whose enjoyment is infringed or threatened by environmental harm” (UNCHR, 2013).

There is no reason to think that climate change is qualitatively different from other types of environmental harm in this respect, and when human rights organs have examined climate change, they have not hesitated to conclude that it can interfere with human rights. The most detailed examination by a human rights body of the effect of climate change on human rights is a 2009 report prepared by the OHCHR at the request of the Human Rights Council (OHCHR, 2009). Drawing on the 2007 assessment report of the Intergovernmental Panel on Climate Change, the OHCHR report describes the adverse effects of climate change on specific rights, including: the right to life, which will be threatened by several weather events such as floods, storms, and droughts, as well as by an increase in hunger and malnutrition; the right to food, which will be jeopardized by increased numbers of people facing malnutrition from decreased crop productivity; the right to water, adversely affected for the more than one billion people receiving melt water by the loss of glaciers and reductions in snow cover; the right to the highest attainable standard of health, which will be infringed not only by malnutrition and extreme weather events, but also by malaria and other diseases that thrive in warmer weather; the right to housing, which has already been compromised by the forced relocation of communities in the Arctic and low-lying island states; and the right of self-determination, which is threatened by the possible inundation and disappearance of small island States (OHCHR, 2009a). The OHCHR report also states that climate change will particularly affect vulnerable groups, including women, children, and indigenous peoples, whose rights are further protected by specific human rights treaties (OHCHR, 2009a).

In response to the report, the Human Rights Council adopted a resolution in March 2009 agreeing that “climate change-related impacts have a range of implications, both direct and indirect, for the effective enjoyment of human rights,” including the rights to life, health, food, water, housing, and self-determination, and encouraging its special rapporteurs “to give consideration to the issue of climate change within their respective mandates” (UNGA, 2009). A number of special rapporteurs have issued reports on the effects of climate change on the rights within their mandates, including on the right to housing and on the right to water (UNCHR, 2009a; OHCHR, 2010). In December 2009, before the Copenhagen Conference of the Parties (COP) to the UN Framework Convention on Climate Change, the special rapporteurs issued a joint statement drawing attention to the dangers that climate change presents to the enjoyment of human rights (OHCHR, 2009b).

States generally seem to agree with these conclusions. Marc Limon has described the shift in the attitudes of government representatives to the Human Rights Council between 2008, when the Council first debated whether to request a report on the topic at all, and 2009, by which time:

no delegation argued with the notion that climate change has implications for a wide-range of explicitly identified, internationally-protected human rights; that already vulnerable ‘climate frontline’ countries are most at risk (and the least able to adapt); and that the human rights impacts do not fall evenly across a given population, but rather target marginalized or vulnerable groups, such as women and children. (Limon, 2010).

Beyond the UN human rights bodies, the Conference of the Parties to the Framework Convention on Climate Change has also recognized the connection between climate change and human rights. The Cancun Agreements adopted by the COP in December 2010 quote language from the 2009 Human Rights Council resolution recognizing that “the adverse effects of climate change have a range of direct and indirect implications for the effective enjoyment of human rights” (UN Conference of the Parties, 2011).

In short, there no longer appears to be any serious doubt that climate change can interfere with the enjoyment of human rights recognized and protected by international law. Indeed, some vulnerable communities are already experiencing such interference. For example, the Inuit, an indigenous people living in the Arctic region, have described to the Inter-American Human Rights Commission how rising temperatures in the Arctic have begun to infringe on their enjoyment of many human rights, including rights to life (because melting ice and permafrost make travel more dangerous), to property (melting permafrost undermines houses and forces residents to leave their traditional homes), and to health (changing temperatures cause the populations of animals on which the Inuit depend for sustenance to decline, leading to reduced nutrition) (Petition to the Inter-American Commission on Human Rights Seeking Relief from Violations Resulting from Global Warming Caused by Acts and Omissions of the United States, 2005). As changes in the climate become more severe and widespread, they will threaten the human rights of more and more people, as the OHCHR report explains.

3. HOW DOES HUMAN RIGHTS LAW REQUIRE STATES TO ADDRESS CLIMATE CHANGE?

As noted above, interference with the enjoyment of a human right is not necessarily equivalent to violation of a legal obligation pertaining to that right. If a mudslide destroys my home, injuring or even killing me, it certainly prevents me from enjoying my human rights to life and health. But the mudslide itself was under no legal duty to respect those rights and therefore cannot violate them. To be a violation of human rights law, the interference with the enjoyment of human rights must be traced to action or inaction by an entity with legal obligations with respect to the human rights, whose action or inaction was inconsistent with those obligations.

Because climate change is a type of environmental harm, albeit a particularly massive and intractable one, the human rights obligations that apply in the context of environmental harm generally should apply to climate change as well. Although the content of these obligations is still evolving, it has become much clearer in recent years. For the most part, the human rights obligations relating to environmental protection do not stem from a right to a healthy, safe, or sustainable environment, which some States might argue has not been universally recognized. Instead, the obligations have been developed and clarified on the basis of human rights, such as the rights to life and health, which are recognized in the Universal Declaration and included in human rights agreements at the UN and regional levels. Although different human rights bodies have derived environmental obligations from different agreements, and often from different

rights, they have reached remarkably similar conclusions. The first section of this part of the chapter describes this emerging environmental human rights legal framework; the second applies it to climate change.

3.1 Human Rights Law and Environmental Protection

As this section explains, human rights law imposes both procedural and substantive obligations upon States with respect to environmental threats to human rights (UNCHR, 2013). Procedurally, States have obligations to ensure that decisions with possible environmental effects are made through a process that provides for examination and dissemination of information about those effects, full and informed participation by those potentially affected, and effective legal remedies if the State fails to meet its obligations. Substantively, States have discretion to decide on appropriate levels of environmental protection, but their decisions cannot result in interference with the enjoyment of human rights beyond certain minimum standards. States are required to refrain from violating these obligations with respect to environmental harm they cause directly, and to protect against such harm caused by non-State actors such as corporations.

A. Procedural Obligations

Some procedural duties in environmental matters are simply particular applications of more general obligations. For example, States' general obligations to respect and protect rights to freedom of expression and association apply to environmental issues just as they do to other issues. However, human rights bodies have added more detailed procedural duties in the environmental context. They have held that when a State is deciding whether to adopt a decision that may result in environmental harm that interferes with the enjoyment of human rights, such as rights to life, health, water, and respect for private and family life, the State must incorporate certain procedural safeguards, including *prior assessment* of environmental impacts, *full and informed participation* by those affected, and *effective remedies* for States' failure to comply with their obligations (UNCHR, 2013).^{xiii}

Some human rights bodies, including the Human Rights Committee, the body charged with overseeing compliance with the ICCPR, have not yet addressed these issues, and the decisions of the human rights bodies that have addressed them do not bind every country in the world. Nevertheless, the similarities in the approaches taken by so many different bodies is striking, as is the fact that the three core procedural obligations of assessment, participation, and remedy are set out in Principle 10 of the 1992 Rio Declaration and elaborated in the 1998 Aarhus Convention (UN Conference on Environment and Development, 1992; Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, 1998). This convergence strongly suggests that these procedural duties are likely to continue to develop along these lines in forums that address environmental threats to the enjoyment of human rights.

B. Substantive Obligations

States are expected to adopt legal frameworks that protect against environmental harm that interferes with the enjoyment of human rights (UNCHR, 2013). In setting substantive standards, States have significant discretion in deciding how to strike the balance between

environmental protection and other societal interests, such as economic development.^{xiii} That discretion has limits, however. Regional tribunals have decided cases in which they concluded that States failed to take reasonably necessary steps to protect against environmental harm to human rights, or failed to strike a fair balance between environmental and other considerations.^{xiv} And after a State has struck such a balance by adopting particular environmental standards in its law, the State should adhere to those standards. The European Court of Human Rights, in particular, has often found that a State has violated its human rights obligations with respect to environmental harm when the State failed to follow its own environmental standards, with resulting interference with the enjoyment of human rights.^{xv}

States cannot discriminate on prohibited grounds in the application of environmental law, any more than they can in the application of other laws (*Mossville Action Now v. United States*, 2010; OHCHR, 1966a). Human rights bodies have described additional obligations on States with respect to groups particularly vulnerable to environmental harm, including women, children, and indigenous peoples (UNCHR, 2013). For example, the Inter-American Court has issued a series of decisions on the obligations of States relating to the rights of indigenous peoples. A leading decision is *Saramaka People v. Suriname*, in which the Court held that States must meet certain minimum procedural standards, including consulting with an affected indigenous people regarding any proposed concessions or other activities that may affect their lands and natural resources, ensuring that no concession will be issued without a prior assessment of its environmental and social impacts, and guaranteeing that the community receives a “reasonable benefit” from any such plan if approved. Moreover, the State must obtain the free, prior, and informed consent of the indigenous people with respect to “large-scale development or investment projects that would have a major impact within [its] territory” (*Saramaka People v. Suriname*, 2007). Requiring the prior consent of those most affected by measures that threaten enormous harm to human rights is a heightened procedural safeguard that avoids the need to set detailed substantive standards.

C. Application to Non-State Actors

A State’s obligations under human rights law with respect to environmental harm extend beyond obligations concerning its own direct contributions to environmental degradation. The State also has obligations to protect against harm from other sources, including non-State actors. Although human rights treaties do not bind private parties directly, they have consistently been construed to require states to take steps to protect these rights from private conduct that interferes with their enjoyment.^{xvi} A State may violate its obligations directly by its own actions, or indirectly through failing to protect against harm caused by others. In the absence of more specific requirements, the State obligation is one of due diligence.^{xvii}

These duties apply in the context of environmental harm as well. For example, the Committee on Economic, Social and Cultural Rights has stated that a State’s obligations regarding the right to water requires it not only to refrain from interfering with the enjoyment of the right directly by “unlawfully diminishing or polluting water . . . through waste from State-owned facilities,” but also to restrain third parties from interfering with the enjoyment of the right, including by pollution (OHCHR, 1966c). More generally, the Committee has stated that to respect and protect the right to health, States must not only refrain from “unlawfully polluting air, water and soil, e.g., through industrial waste from State-owned facilities,” but must also adopt and implement “national policies aimed at reducing and eliminating pollution of air, water

and soil” (UN Committee on Economic, Social and Cultural Rights, 2000). The regional human rights systems have taken similar positions.^{xviii}

3.2 Human Rights and Climate Change

The framework described in the previous section suggests that States must meet certain obligations in addressing the threats that climate change poses to the enjoyment of human rights. Procedurally, States must thoroughly assess the possible environmental effects of their actions relating to climate change, disseminate information about those effects to those potentially affected, allow all those affected to participate in the decision-making processes relating to climate change, and provide legal remedies to ensure that these requirements are followed. Substantively, States have some discretion to strike a balance between protecting human rights from climate change and pursuing other legitimate social interests, but the balance cannot be unreasonable, and States should take into account the additional protections they may owe members of highly vulnerable groups. States should follow these obligations both with respect to their own actions and to the actions of non-State actors within their jurisdiction.

However, there are obstacles to such a straightforward application of human rights principles to climate change. One possible obstacle is the difficulty of tracing clear causal links between anthropogenic contributions to climate change and the effects of climate change on the enjoyment of human rights. The OHCHR stated in its 2009 report that it is “virtually impossible to disentangle the complex causal relationships” linking emissions from a particular source to a particular effect; climate change is often only one of many contributing factors to severe weather events or desertification, for example (OHCHR, 2009a). That many of the worst effects of climate change are expected to occur in the future makes determining causation even more difficult. Concerns about the difficulty of making these causal connections may have contributed to the refusal of the Inter-American Human Rights Commission to hear the complaint by the Inuit against the United States.^{xix}

Tracing causal links is less difficult, however, when contributions to and effects of climate change are considered in the aggregate. Taken as a whole, the connections between contributions of greenhouse gases, the effects of increasing greenhouse gases on global temperature, and the effects of rising temperatures on the enjoyment of human rights are relatively clear and rapidly becoming clearer. Further, it is possible to identify, at the aggregate level, the States whose emissions contribute most to the problem: combined, China and the United States contribute more than one-third of total emissions, and together with the European Union cause more than one-half of net global emissions.^{xx} It is also possible to identify those communities that are the most vulnerable to climate change. To take just one example, the 2007 IPCC assessment report states with “very high confidence” that in the polar regions there is already “strong evidence of the ongoing impacts of climate change on . . . communities,” and that “[w]arming and thawing of permafrost will bring detrimental impacts on community infrastructure” (IPCC, 2007). It states with “high confidence” that “[s]ubstantial investments will be necessary to adapt or relocate physical structures and communities” (IPCC, 2007).^{xxi}

Moreover, whether a State has “caused” climate change does not determine whether the State has any legal obligations to do something about its effects. As noted above, human rights law requires each State to do more than merely refrain from interfering with human rights itself; it also requires the State to undertake due diligence to protect against such harm from other sources. Although a mudslide cannot itself violate my rights, it may be the occasion of a

violation if my State fails to take reasonable steps to protect me from its effects. This is not merely a hypothetical case: after mudslides devastated the town of Tyrnauz in the central Caucasus, the European Court of Human Rights held that Russia had violated its obligation to protect against threats to the right to life by failing to maintain observation posts and dams (Budayeva v. Russia, 2008). This reasoning applies to climate change as well. Even if it is not possible to connect a particular release of greenhouse gases to a particular infringement of human rights, States may well have obligations to try to protect against the harm caused by climate change. In the words of the 2009 OHCHR report, “Irrespective of whether or not climate change effects can be construed as human rights violations, human rights obligations provide important protection to the individuals whose rights are affected by climate change” (OHCHR, 2009a).^{xxii}

The more fundamental problem with applying environmental human rights principles to climate change is that the principles were developed primarily to address environmental harm that does not cross international borders. Almost all of the regional jurisprudence, in particular, arises from cases in which the benefits and the costs of the environmental harm are felt within the domestic jurisdiction of one State.^{xxiii} In such cases, it makes sense for human rights bodies to allow a State wide discretion in deciding how to strike a balance between environmental harm and other interests, as long as its decisions result from well-informed, careful consideration by all those affected. But this approach does not translate easily to transboundary problems such as climate change, where the benefits and the costs are not all incurred by the same polity.

More generally, whether human rights law *ever* requires States to protect the human rights of those outside their own territory and jurisdiction is a difficult, disputed question. Some treaties, including the ICCPR and the American and European Conventions on Human Rights, include explicit jurisdictional limits.^{xxiv} In contrast, the ICESCR requires each of its parties “to take steps, individually *and through international assistance and co-operation*, especially economic and technical, to the maximum of its available resources, with a view to achieving progressively the full realization of the rights recognized in the present Covenant by all appropriate means” (OHCHR, 1966b). On the basis of this language, the Committee on Economic, Social and Cultural Rights has interpreted the Covenant to give rise to extraterritorial duties.^{xxv} In particular, it has stated that developed countries have obligations to assist developing countries to meet their obligations.^{xxvi} However, developed countries have strongly disagreed with this interpretation (Craven, 2007).

Because of the lack of clarity in the extraterritorial application of human rights obligations generally, and in the environmental context in particular, the human rights principles relevant to climate change are clearest with respect to action (or inaction) by a State that relates to the effects of climate change on the enjoyment of human rights within that State’s jurisdiction. These obligations may be called *internal* obligations, to contrast them with possible *extraterritorial* obligations relating to harm from the effects of climate change outside the State’s territorial jurisdiction. As explained below, it seems clear that a State’s internal obligations include duties to help those within its jurisdiction adapt to climate change, and may also include duties of the State to mitigate its own emissions. Although extraterritorial obligations are cloudier, it is still possible to discern some emerging principles.

A. Internal Obligations

Just as human rights law requires a State to try to protect individuals from mudslides and other life-threatening natural disasters that were not caused by the State, it seems logical that it requires a State to try to protect its people from climate change whether or not the State substantially contributed to the problem. Of course, questions of causation may well be relevant to the particular content of a State's duties relating to climate change. If a State's contribution to global greenhouse gas concentrations is so minimal that lowering its emissions would have no appreciable effect on the effects of climate change on human rights, then it may be unreasonable to expect it to take Herculean measures to reduce its emissions. Even in that case, however, the State would still be obligated to help its people to adapt to the harms threatened by climate change. Thus, for many States, their obligations to take adaptation measures will often be clearer than their obligations to mitigate harm by reducing emissions (Hall and Weiss, 2012).

The environmental human rights framework described in the preceding section informs the nature of the human rights obligations relating to climate change. According to that framework, a State should adhere to both procedural and substantive duties in addressing the internal effects of climate change. Procedurally, the State should carefully assess the likely impacts of climate change within its jurisdiction, disseminate information about those effects, allow full participation of all those affected in the process of deciding how to address the problem, and provide legal remedies to ensure that these procedures are followed. Decisions that result from a fully informed, participatory process should be entitled to deference, although they could not violate minimal levels of human rights.

For example, a small island State facing threats to life, health, and other human rights as a result of rising sea levels might consider a large number of potential responses, including constructing sea walls, consolidating its population on fewer islands, developing evaluation strategies, and so forth. It could reasonably take into account the options' relative cost and feasibility, together with their effectiveness in protecting human rights. As long as its decision resulted from an informed, fully participatory process, the State would have a great deal of discretion to choose an optimal policy. The State could not, however, choose a policy that violates basic human rights standards. It could not, for example, fail to take steps to warn its people of foreseeable threats, or adopt climate policies that discriminate on the basis of sex, race, religion, or any other protected status.

While States clearly have duties to try to adapt to climate change based solely on its internal effects, it is less obvious whether human rights law obligates a State to try to mitigate its contributions to climate change based solely on the effects of climate change on its own people. Most States contribute such a small fraction of global greenhouse gas emissions that even a sizable reduction by any one of them would have no significant effect on the enjoyment of human rights of its own people. This calculus is different for the largest emitters, such as China, the European Union, and the United States, each of which emits a substantial fraction of all greenhouse gases. Arguably, human rights law requires them to reduce their contribution to climate change based solely on the potential benefit such reductions would have for their own people, without taking into account the effects on those in other countries.^{xxvii}

Even States that emit relatively small amounts of greenhouse gases may be required to try to work toward a general agreement to reduce global emissions, based on their general duty not only to refrain from harming human rights themselves, but also to protect against harm from others. A State has limited influence over the conduct of other States, but it should use what

influence it has to try to reduce global emissions to levels that do not interfere with the human rights of those within its jurisdiction. Apart from legal rights that States may have vis-à-vis other States based on other norms of international law, they may try to influence one another through bargaining or persuasion. Because meaningful reductions in global emissions require action by more than one State, as a practical matter this obligation may require each State to seek an effective international agreement to reduce greenhouse gas emissions to levels that protect its own people from the adverse effects of climate change. In that context, its duties to its own people may obligate it to commit to reductions in its own emissions, as part of its effort to obtain such a global agreement (International Council on Human Rights Policy, *Climate Change and Human Rights: A Rough Guide*, 2008).

Human rights standards apply not only to decisions about how much climate protection to adopt, but also to the measures through which the protection was achieved. For example, efforts to mitigate climate change through the promotion of biofuels, emissions reduction projects, and forest preservation have been accused of violating the human rights of individuals directly affected by the projects (Roht-Arriaza, 2010). The States in which such projects occur have duties to protect against their harmful effects on the individuals within their territory.

B. Extraterritorial Obligations

The previous section explains that even if human rights law is viewed as giving rise to no extraterritorial obligations at all, each State still has duties to ameliorate the effects of climate change on the human rights of those within its own jurisdiction. But this seems to be a radically incomplete method of addressing a global problem whose effects are inherently transboundary.

There are at least three arguments that human rights law also requires States to take into account the extraterritorial effects of their contributions to climate change. First, one might argue that the language in the ICCPR and the American and European Conventions that limits a State's obligations to individuals within its jurisdiction^{xxviii} is broad enough to include those in other countries who are affected by the extraterritorial consequences of the State's contributions to climate change. To be within the jurisdiction of a State within the meaning of these agreements, an individual must be within the "effective control" of the State.^{xxix} It might be possible to argue that the effects of climate change could be severe enough in some cases to place an affected community under the effective control of other, more powerful States, although the argument would require an expansive interpretation of the "effective control" standard.

Second, one might argue that States have an obligation not to interfere with other States in the implementation of their own human rights obligations, based on the general principle of good faith in carrying out treaty obligations.^{xxx} For example, even if a State refuses to accept the interpretation of the Committee on Economic, Social and Cultural Rights that the ICESCR imposes extraterritorial obligations of assistance, at a minimum it could be read to require each State, as Matthew Craven has written, "to ensure that it does not undermine the enjoyment of rights of those in foreign territory" (Craven, 2007). Under this view, each State has an obligation to try to avoid actions that would prevent other States from carrying out their own duties to fulfill the rights to health, food, and water of those within their jurisdiction.^{xxxi} Contributing to climate change obviously makes it more difficult for other States to fulfill those obligations.

There are difficulties with this argument, however. Developed countries have not embraced the Committee's expansive view of extraterritorial obligations, as noted above, and the United States – a particularly important contributor of greenhouse gas emissions – is not a party

to the ICESCR. Moreover, even if these arguments for extraterritorial duties were accepted, it is unclear how well they would support the application of the environmental human rights framework to climate change. In accordance with that framework, each State may comply with its obligations to protect the human rights of individuals within its own jurisdiction by following procedural requirements and ensuring that the resulting decisions do not violate minimum standards. But this approach has its limits when applied extraterritorially. Even if a State undertakes transboundary environmental impact assessments, provides information to those potentially affected by the actions under its jurisdiction, and allows them to participate in the decision-making process, those living abroad will still not have the same rights as those within the State, including the right to vote. As a result, the source country will retain the authority to decide whether to proceed with the activities threatening transboundary harm.

A third argument for extraterritorial obligations would try to avoid the objections to the first two by relying on a duty of international cooperation (Knox, 2009). The 2009 report of the OHCHR emphasizes the relevance to climate change of this obligation,^{xxxii} which is based not only on the ICESCR, but also, and more fundamentally, on the Charter of the United Nations. In the Charter, all UN member States “pledge themselves to take joint and separate action in cooperation with the Organization for the achievement of [inter alia] universal respect for, and observance of, human rights and fundamental freedoms for all” (OHCHR, 2009a; Charter of the United Nations, 1945). While this language is very general, it strongly suggests that States have committed to take joint action to address global challenges to human rights. States have often worked together to address such threats in the past,^{xxxiii} and climate change is inherently a global problem that requires global cooperation to solve.

The duty to cooperate could require States to negotiate and implement international climate accords that meet human rights minimum standards. In particular, the accords should strive to protect against the adverse effects of climate change on human rights. To that end, the agreements must provide both for the reduction of greenhouse gases to levels that will not interfere with the human rights of those vulnerable to climate change, and for adaptation to unavoidable changes that would otherwise harm their human rights. The environmental human rights framework could inform these principles. As applied at the level of international cooperation, the procedural requirements of that framework would require, for example, that States jointly assess the effects of their actions,^{xxxiv} that they bring those assessments to the attention of the public, and that they provide for informed public participation in international climate decisions. Substantively, that framework acknowledges that States have to make trade-offs in deciding on levels of environmental protection, but requires that the trade-offs not violate minimum human rights standards. Although those minimum standards still require further clarification, it seems likely that they would preclude policies that would result in the destruction of entire communities through, for example, the inundation of small island States.

4. CONCLUSION

The human rights principles that apply to environmental harm have become much clearer in recent years. In order to protect a wide range of human rights from environmental harm, human rights bodies have described obligations on States to assess the environmental impacts of proposed actions, to disseminate environmental information, to provide for public participation in environmental decision-making (including by safeguarding rights of freedom of expression

and association), and to ensure effective remedies for environmental interference with the enjoyment of human rights. States have obligations to adopt legal protections against environmental harm that interferes with the enjoyment of human rights, including harm caused by private actors.

Human rights law does not require States to prohibit all activities that may cause any environmental degradation. They have discretion to strike a balance between environmental protection and other legitimate societal interests, but the balance should be reasonable and should not result in unjustified infringements of human rights. Finally, States have a general requirement of non-discrimination in the application of environmental laws, as well as specific obligations to members of groups particularly vulnerable to environmental harm, such as indigenous peoples.

Applying this environmental human rights framework to climate change is simplest with respect to internal obligations – that is, obligations of States relating to the effects of climate change within their own territory and jurisdiction. It is relatively clear that States must protect their people from the harmful effects of climate change on the enjoyment of human rights, and that such protection includes reasonable adaptation measures and, in some cases, mitigation as well. However, it is more difficult to identify clear obligations on each State relating to the extraterritorial effects of actions within its jurisdiction. There are legal arguments for such obligations, but until they are more widely accepted, the application of human rights law to the most urgent and grave threats of climate change will be severely constrained.

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ⁱ For a collection of ethical perspectives on climate change, see *Climate Ethics: Essential Readings* (Gardiner et al., 2010).

ⁱⁱ Treaty law is not the only source of international human rights obligations, but it is the most important source relevant to climate change. The potential relevance of customary human rights law is limited partly by the near-universality of membership of major human rights treaties, and partly by the lack of consensus on how far customary obligations extend beyond a small number of heinous crimes. See Restatement (Third) of the Foreign Relations Law of the United States § 702 (1987) (listing duties of States under customary law not to practice, encourage, or condone: genocide; slavery or the slave trade; murder or causing individuals to disappear; torture or other cruel, inhuman or degrading treatment or punishment; prolonged arbitrary detention; systematic racial discrimination; and “a consistent pattern of gross violations of internationally recognized human rights”).

ⁱⁱⁱ For scholarship on climate change and human rights, see, e.g., *Human Rights and Climate Change* (Humphreys, ed., 2010); International Council on Human Rights Policy, *Climate Change and Human Rights: A Rough Guide* (2008); *Introduction: Climate Change and Human Rights: Unpacking the Issues* (Bodansky, 2010); *Restoring the Climate by Realizing Rights: The Role of the International Human Rights System* (Cameron and Limon, 2012); *Climate Change and Human Rights Law* (Knox, 2009); *The Janus-Head of Human Rights and Climate Change: Adaptation and Mitigation* (Pedersen, 2011); *Applying Human Rights Norms to Climate Change: The Elusive Remedy* (Stephens, 2010).

^{iv} Compare European Convention on Human Rights, 1950 and American Convention on Human Rights, 1969 (setting out civil and political rights), with European Social Charter (Council of Europe, 1961) and Additional (San Salvador) Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights, 1988 (setting out economic, social and cultural rights).

^v ICCPR, arts. 2(1), 26 (OHCHR, 1966a); ICESCR, art. 2(2) (OHCHR, 1966b); African Charter, art. 2 (Organization of African Unity, 1981); American Convention, *supra* note iv, art. 1(1); European Convention, *supra* note iv, art. 14. Some treaties elaborate on non-discrimination on the basis of certain statuses, such as race and gender. E.g., International Convention on the Elimination of All Forms of Racial Discrimination (CERD), 1965; Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), 1979.

^{vi} See ICCPR art. 27 (“persons belonging to [ethnic, religious or linguistic] minorities shall not be denied the right, in community with other members of their group, to enjoy their own culture, to profess and practise their own religion, or to use their own language”) (OHCHR 1966a).

^{vii} Most of the regional human rights systems recognize some form of a right to a healthy environment. See African Charter, *supra* note v, art. 24 (“all peoples shall have the right to a general satisfactory environment favorable to their development” (art. 24); San Salvador Protocol, *supra* note iv, art. 11(1) (“everyone shall have the right to live in a healthy environment”); Arab Charter, art. 38 (including a right to a healthy environment as part of the right to an

adequate standard of living that ensures well-being and a decent life) (League of Arab States, 2004); Association of Southeast Asian Nations, Human Rights Declaration, 2012 (incorporating a “right to a safe, clean and sustainable environment” as an element of the right to an adequate standard of living).

Although the European regional human rights regime does not incorporate an explicit right to a healthy environment, it has been recognized in a regional European environmental agreement. See (Aarhus) Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, 1998, art. 1 (referring to “the right of every person of present and future generations to live in an environment adequate to his or her health and well-being”).

^{viii} More than 90 States have adopted such a right in their national constitutions. See David Richard Boyd, *The Environmental Rights Revolution: A Global Study of Constitutions, Human Rights, and the Environment* (2012).

^{ix} In the American and European systems, States that are party to the constitutive human rights agreement – the American Convention and the European Convention – are subject to the jurisdiction of the Inter-American Court of Human Rights and the European Court of Human Rights, respectively. In the African system, States become subject to the African Court on Human and Peoples’ Rights by joining a 1998 protocol to the African Charter.

^x E.g., Adverse effects of the illicit movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights (UNCHR, 2001).

^{xi} See, e.g., *Öneryildiz v. Turkey* at 115 (2004); *Saramaka People v. Suriname* at para. 95 (2007); *Indigenous Cmty. Yakye Axa v. Paraguay* at para. 143 (2005); *Mayagna (Sumo) Awas Tingni Cmty. v. Nicaragua* at para.148 (2001); *Marangopoulos Found. for Human Rights v. Greece* at para. 195 (2006); *Soc. & Econ. Rights Action Ctr. v. Nigeria (Ogoniland case)* at para. 58 (2001); *López Ostra v. Spain* at 277, 295 (1994); *Fadeyeva v. Russia* at 255, 281 (2005); *Taşkin v. Turkey* at 179, 205 (2004).

^{xii} See, e.g., ICESCR General Comment 15, para. 56 (basing these requirements on the right to water) (OHCHR 1966c); *Taşkin, supra* note xi, at 206-07 (right to respect for private and family life) (*Taşkin v. Turkey*, 2004); *Öneryildiz v. Turkey* (right to life) (*Öneryildiz v. Turkey*, 2004); *Ogoniland Case* para, 53 (rights to health and to a satisfactory environment) (*Soc. & Econ. Rights Action Ctr. V. Nigeria*, 2006). The human rights bodies have derived these duties from civil and political rights and from economic, social and cultural rights, despite the fact that the two sets of rights are generally understood to give rise to two different types of duties. The agreements protecting civil and political rights generally require States to immediately respect and ensure those rights. E.g., ICCPR, *supra* note v, art. 2(1) (OHCHR, 1966a); American Convention, *supra* note iv, art. 1 (American Convention on Human Rights, 1969); European Convention, *supra* note iv, art. 1 (European Convention on Human Rights, 1950). In contrast, most agreements protecting economic, social, and cultural rights require the parties to work toward their progressive realization. E.g., ICESCR, *supra* note v, art. 2(1) (OHCHR, 1966b); San Salvador Protocol, *supra* note iv, art. 1 (Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights, 1988); European Social Charter, *supra* note iv pt. I (Council of Europe, 1961).

^{xiii} See, e.g., *Fadeyeva, supra* note xi at 285 (*Fadeyeva v. Russia*, 2005); *Giacomelli v. Italy* at 189, 217 (2006); *Hatton v. United Kingdom* at 217 (2003).

^{xiv} See, e.g., *López Ostra, supra* note xi (*López Ostra v. Spain*, 1994); *Tătar v. Romania*, 2009; *Ogoniland Case, supra* note xi, (*Soc. & Econ. Rights Action Ctr. v. Nigeria*, 2001).

^{xv} E.g., *López Ostra, supra* note xi (*López Ostra v. Spain*, 1994); *Fadeyeva, supra* note xi (*Fadeyeva v. Russia*, 2005). The relevant environmental commitments may also include international environmental norms to which the State is subject. See *Tătar, supra* note xiv (*Tătar v. Romania*, 2009); Dinah L. Shelton, *Tătar c. Roumanie*, at 247 (2010).

^{xvi} See Human Rights Comm., General Comment 31, *The Nature of the General Legal Obligation Imposed on States Parties to the Covenant*, para. 6 (UNCHR, 2004); Comm. on Economic, Social and Cultural Rights, General Comment 12, *The Right to Adequate Food*, para. 15 (UN Committee on Economic, Social and Cultural Rights, 1999). Decisions from the regional human rights bodies include *Commission Nationale de Droits de l'Homme et des Libertés v. Chad* (1995); *Velásquez Rodríguez v. Honduras* (1988); *Z and Others v. United Kingdom* (2002).

^{xvii} See generally Andrew Clapham, *Human Rights Obligations of Non-State Actors* (2006); John H. Knox, *Horizontal Human Rights Law* (2008).

^{xviii} See, e.g., *Hatton v. United Kingdom* at 216 (*Hatton v. United Kingdom*, 2003); *López Ostra, supra* note xiii (*López Ostra v. Spain*, 1994); *Ogoniland Case, supra* note xi, para. 44-47 (*Soc. & Econ. Rights Action Ctr. v. Nigeria*, 2001); Inter-American Commission on Human Rights, *Report on the Situation of Human Rights in Ecuador* at 88-92 (1997).

^{xix} The Commission did not issue a formal decision; instead, it stated only that it was not possible to process the complaint “at present” because “the information provided does not enable us to determine whether the alleged facts would tend to characterize a violation of rights protected by the American Declaration.” Letter from Ariel E. Dulitzsky, Assistant Executive Sec’y, Inter-American Commission on Human Rights, to Paul Crowley, Legal Representative of the Inuit (Nov. 16, 2006).

^{xx} Any allocation of legal responsibility would be complicated by many other factors, including historical contributions, per capita emissions, and technical capacity. The point here is simply that the difficulty of tracing causal chains is not necessarily in itself an insuperable barrier to such an allocation, at least at an aggregate level.

^{xxi} “Very high confidence” indicates at least 90% certainty of being correct, and “high confidence” 80% confidence of being correct (IPCC, 2007).

^{xxii} *Report on the Relationship between Climate Change and Human Rights* at para. 71 (OHCHR, 2009a). Questions of causation may well be relevant to the particular content of a State’s duties relating to climate change, however, as the following sections explain.

^{xxiii} An exception is *Tătar v. Romania*, *supra* note xiv, which concerned, *inter alia*, transboundary water pollution from Romania to Hungary and Serbia (*Tătar v. Romania*, 2009). The transboundary harm was not the principal focus of the case, however. *See also* General Comment 15, *supra* note xii, para. 33 (statement by the Committee on Economic, Social and Cultural Rights that the parties to the ICESCR should take steps “to prevent their own citizens and companies from violating the right to water of individuals and communities in other countries”) (OHCHR, 1966c).

^{xxiv} ICCPR, *supra* note v, art. 2(1) (requiring each of its parties to respect and ensure the rights “to all individuals within its territory and subject to its jurisdiction”) (OHCHR, 1966a); American Convention, *supra* note iv, art. 1 (requiring the parties to ensure the rights “to all persons subject to their jurisdiction”) (American Convention on Human Rights, 1969); European Convention, *supra* note iv, art. 1 (the parties shall secure the rights “to everyone within their jurisdiction”) (European Convention on Human Rights, 1950).

^{xxv} Since 1999, almost every one of its general comments on particular rights, including the rights to food, health, water, work, social security, and to take part in cultural life, includes a section on such obligations.

^{xxvi} *E.g.*, General Comment 14, para. 45 (UN Committee on Economic, Social and Cultural Rights, 2000); General Comment 31, *supra* note xvi, para. 14 (UNCHR, 2004).

^{xxvii} Again, per capita emissions, past contributions, and technical capacity would be complicating factors.

^{xxviii} Although the ICCPR actually refers to duties extending only to individuals “within [the State’s] territory and subject to its jurisdiction,” the general view is that the language should be read disjunctively, to require the State to respect and ensure the rights of those within its territory *and* those within its jurisdiction. *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory*, Advisory Opinion, para. 111 (2004); *To Respect and to Ensure: State Obligations and Permissible Derogations* at 74 (Buergethal, 1981); *Extraterritoriality of Human Rights Treaties* at 79 (Meron, 1995).

^{xxix} General Comment 31, *supra* note xvi, para. 10 (UNCHR, 2004); *Banković v. Belgium* (2001); *Alejandro v. Cuba*, para. 25 (referring to “authority”) (*Alejandro v. Cuba*, 1999). “Effective control” of individuals may include not only their arrest or capture, but also their presence in a territory under the military control of the State (*Al-Skeini v. United Kingdom*, 2011).

^{xxx} Vienna Convention on the Law of Treaties art. 26 (“Every treaty in force is binding upon the parties to it and must be performed by them in good faith.”) (Vienna Convention on the Law of Treaties, 1969); *see* Mark E. Villiger, *Commentary on the 1969 Vienna Convention on the Law of Treaties* at 367 (Villiger, 2009).

^{xxxi} *See* CESCR General Comment 15, *supra* note xii, para. 31 (OHCHR, 1966c); CESCR General Comment 14, *supra* note xxvi, para. 41 (UN Committee on Economic, Social and Cultural Rights, 2000); CESCR General Comment 12, *supra* note xvi, para. 37 (UN Committee on Economic, Social and Cultural Rights, 1999). This obligation to refrain from interfering with other States’ ability to carry out their own obligations could also require a State to take steps to prevent private parties under its jurisdiction or control from harming human rights in other states. *See* CESCR General Comment 14, *supra* note xxvi, para. 39 (UN Committee on Economic, Social and Cultural Rights, 2000).

^{xxxii} OHCHR Report, *supra* note xxii, para. 99 (“International human rights law complements the United Nations Framework Convention on Climate Change by underlining that international cooperation is not only expedient but also a human rights obligation and that its central objective is the realization of human rights.”) (OHCHR, 2009a).

^{xxxiii} *See, e.g.*, Reservations to the Convention on the Prevention and Punishment of the Crime of Genocide at 23 (1951) (noting “the universal character both of the condemnation of genocide and of the co-operation required ‘in order to liberate mankind from such an odious scourge’”) (quoting Genocide Convention, 1948).

^{xxxiv} The IPCC reports go a long way toward satisfying this requirement, although they could do much more to assess the effects of climate change on the enjoyment of human rights in particular.