

Contents

ACKNOWLEDGEMENTS	5
INTRODUCTION	7
ROLE OF THE JUDICIARY IN ENVIRONMENTAL CONSTITUTIONALISM	11
A TAXONOMY OF ENVIRONMENTAL CONSTITUTIONALISM A. Substantive Rights B. Procedural Environmental Rights C. Other Aspects of Environmental Constitutionalism 1. Environmental Obligations, Duties and Policies 2. Rights to Water 3. Rights of Nature 4. Sustainability and Public Trust 5. Climate Change 6. Dignity D. Subnational Environmental Constitutionalism	18 19 21 22 22 23 23 24 25 25
JUSTICIABILITY OF ENVIRONMENTAL CONSTITUTIONALISM A. Presumptions About Justiciability B. Who Can Enforce Constitutional Environmental Rights? C. Who is Responsible?: Identifying the Appropriate Defendant D. Timing: When is the Right Time to File a Claim? E. Justiciability and Process F. Affirmative Defenses	29 29 31 36 37 38 40
ADJUDICATING ENVIRONMENTAL CONSTITUTIONALISM A. Challenges in Adjudicating Environmental Rights 1. Interpreting Constitutional Text 2. Identifying Breaches B. Four Types of Judicial Interpretation 1. Independent Environmental Rights 2. Dependent Environmental Rights 3. Derivative Environmental Rights 4. Dormant Environmental Rights	43 43 47 48 48 51 53 56

REMEDIES	59
A. State Obligations under the International Law Framework.	59
B. The Range of Remedies	61
1. Preventing Further Environmental Harm.	61
2. Injunctions.	61
3. Damages	68
4. Compliance Orders	69
5. Imprisonment	70
C. Challenges to Enforcement	71
ENVIRONMENTAL DIGNITY RIGHTS	74
A. Dignity Rights	74
B. Dignity and the Environment	 75
C. Dignity Rights and Environmental Constitutionalism	76
D. Bringing Dignity Rights into Environmental Constitutionalism	77
1. Defining the cause of action	77
2. Standing	78
3. Remedies	79
	_
ENVIRONEMENTAL CONSITUTIONALISM AND CLIMATE JUSTIC	
A. Climate Justice	81 81
B. Express Constitutional Provisions Addressing Climate Change	83
C. Climate Constitutionalism and Justice in the Courts	84
CONCLUSION: JUDICIAL ENGAGEMENT OF ENVIRONMENTAL	
CONSTITUTIONALISM	88

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We hope that you find this to be a useful resource, and invite your comments and suggestions for improvement (jrmay@widener.edu, edaly@widener.edu).

-James R. May & Erin Daly



INTRODUCTION

Courts matter. They are essential to the rule of law. Without courts, laws can be disregarded, executive officials left unchecked, and people left without recourse. And the environment and the human connection to it can suffer. Judges stand in the breach. That said, judges can hardly on their own cause wholesale transformation of domestic environmental policy. In many countries, constitutional and apex courts have spoken seldom if at all about environmental constitutionalism. And yet, it is our contention that even these episodic assertions are important because they are indicative of a growing worldwide awareness of the potential of environmental constitutionalism. The mere fact that courts are focusing on the constitutional dimensions of environmental issues makes it more likely that environmental awareness will seep into the cultural consciousness for present and future generations. In environmental constitutionalism, a little goes a long way.

This Handbook is designed to provide jurists with an overview of environmental constitutionalism: we address what it is, the peculiar practical and procedural issues it presents, and how courts from around the globe have engaged it. Environmental constitutionalism is a relatively recent phenomenon at the confluence of constitutional law, international law, human rights, and environmental law. It embodies the recognition that the environment is a proper subject for protection in constitutional texts and for vindication by constitutional courts worldwide. Environmental constitutionalism offers one way to engage environmental challenges that fall beyond the grasp of other legal constructs. It can be coalescent, merging governmental structures and individual rights approaches to further individual and collective norms and policies. It can be used to protect local concerns—such as access to fresh food, water or air—or global concerns like biodiversity and climate change that share elements of both human rights and environmental protection.

Environmental constitutionalism is variable, encompassing substantive rights, procedural rights, directive policies, reciprocal duties, or combinations of these and other qualities. Some aspects are fairly common. For example, about one-half of the countries of the world expressly or impliedly recognize a constitutional right to a quality environment. About the same number impart a corresponding duty on individuals to protect the environment.

Some provisions are quite specific, such as those that provide for rights of nature, or rights to potable water or other natural resources. Some are more ephemeral, recognizing trust responsibilities over natural resources or toward future generations, or addressing related subjects like sustainability or climate change. Some recognize environmental stewardship as a matter of national policy.

While most constitutional provisions addressing environmental concerns are narrative, some incorporate numerical outcomes, such as maintaining a percentage of prescribed tree cover, as in Bhutan (60 percent) and Kenya (10 percent).

There is also an uptick in provisions that are designed to afford special process rights in environmental matters. Environmental procedural rights normally involve requirements for environmental assessment, access to information, or rights to petition or participate. Such rights help to keep countervailing substantive rights vital. A constitutional guarantee to a

beneficial environment may be more likely to take root when stakeholders have the right to receive free and timely information, participate in deliberations, and judicially challenge environmental decisionmaking. Procedural environmental constitutionalism is also important in its own right, and can be as or more efficacious than substantive environmental rights if courts are more comfortable ordering procedural rather than substantive remedies.

Environmental constitutionalism is playing an important role in recognizing the human rights implications of environmental degradation and climate disruption; to that extent, it has the capacity to address the sorts of environmental problems felt most acutely by those often ignored or underserved by existing legal structures. International treaties, principles and custom do little to advance environmental rights at the local and subsidiary level. There is as of yet no global environmental rights treaty. Moreover, multilateral and bi-lateral treaties that address environmental concerns are often of limited if any utility to individuals. And while domestic statutory and regulatory laws affording environmental protection and resource conservation are quite advanced in many nations, these laws seldom aim to advance environmental rights or environmentally-related social rights. In addition, while international human rights regimes most nearly approach the notion that individuals have a fundamental right to a quality environment, they are also often out of reach to individuals who would gain from the recognition of environmental rights at the constitutional level. Environmental constitutionalism can help to bridge the gaps left by these other legal regimes.

Some countries, like Brazil, France, and South Africa, incorporate most or all of environmental constitutionalism, while others eschew it entirely. And, in some countries, it exists almost entirely as a result of judicial action. The variety of provisions, aiming to protect different aspects of the environment with a range of scaffolding and enforcement mechanisms, attests to the growth of environmental constitutionalism throughout the world in number and in relevance.

Environmental constitutionalism is growing at the subnational level too, filling gaps in federal systems. Most prominently by states in the Americas in general, and Brazil in particular, subnational governments around the globe have seen fit to constitutionalize substantive and procedural environmental rights, environmental duties, and sustainable development for present and future generations, often with much more specificity and enforceability than provided in national constitutions. Subnational environmental constitutionalism can also be valuable in countries that have not yet recognized environmental rights at the federal level.

Environmental constitutionalism is an essential node in the web of national management of the environment, along with national statutory schemes such as environmental impact assessments and water framework legislation, adherence to international, multilateral and regional treaties and norms, and dialogue with subnational and local governments. As a result, it can be a complement to different regimes at the various levels of governance. Indeed, system of environmental rights, protections, and procedures can have impact beyond the courtroom: countries that have adopted environmental constitutionalism have been shown to have smaller per capita ecological footprints, have higher performance on several indicators of environmental indicators, be more likely to ratify international environmental agreements. There is also some evidence that environmental constitutionalism promotes domestic environmental laws and regulations, and may also be the culmination of, as well

as the precursor to, domestic environmental laws. In sum, environmental constitutionalism is integral, not substitutive: it supports and scaffolds existing international and national legal systems. It advances constitutionalism generally and is a fitting subject for judicial consideration and examination.

The Handbook has eight chapters, each addressing subjects that jurists are likely to consider when hearing claims involving constitutional environmental provisions.

Chapter 1 orients the roles of the judiciary in resolving claims sounding in environmental constitutionalism, including climate change.

Chapter 2 surveys how environmental constitutionalism is exhibited at the national and subnational levels around the globe, including substantive, procedural and other provisions.

Chapter 3 considers the justiciability of constitutional environmental rights, including standing, causes of action, timing and defenses, and presumptions about enforceability.

Chapter 4 examines the particular challenges in interpreting and applying constitutional environmental claims.

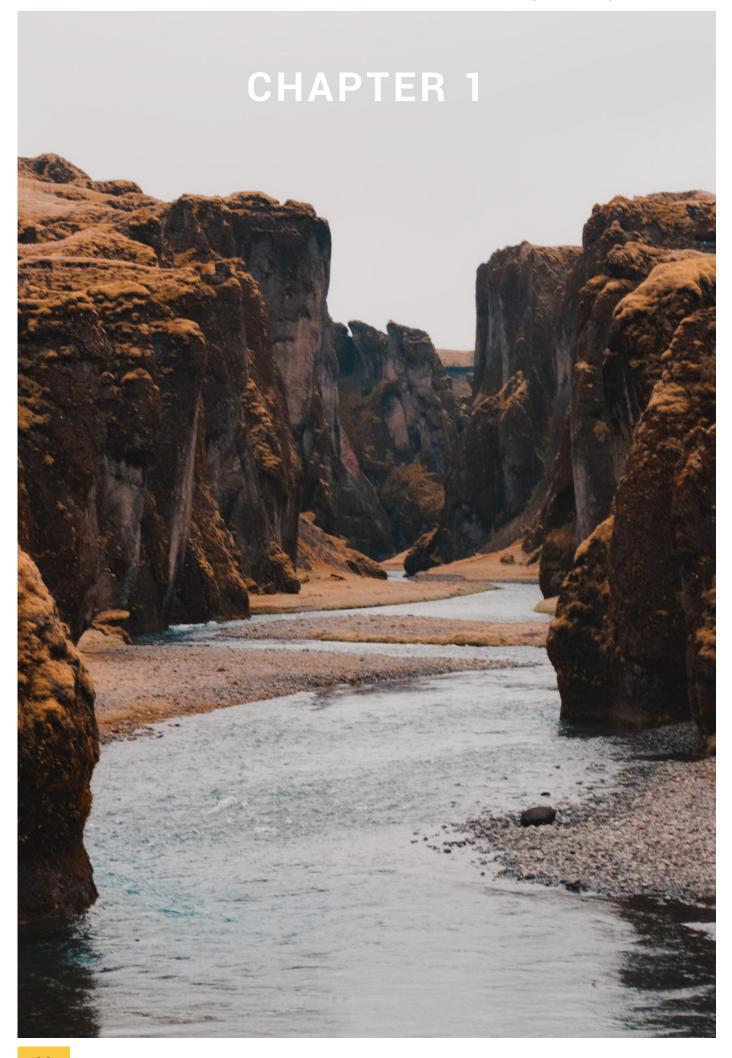
Chapter 5 discusses judicially-imposed remedies for violations of constitutional environmental rights.

Chapter 6 explains the interplay between constitutionally-incorporated dignity rights and environmental constitutionalism.

Chapter 7 engages the role of environmental constitutionalism in advancing climate justice.

Chapter 8 concludes by exploring the particular and sometimes peculiar challenges and opportunities that environmental constitutionalism presents jurists.

The associated *Companion to the Global Judicial Handbook on Environmental Constitutionalism* (United Nations Environment Programme, Erin Daly & James R. May, 2018) contains leading cases (edited) and constitutional provisions from around the globe, as well as reference materials, a bibliography, a map of countries that have incorporated environmental rights into their national constitutions, and an infographic of environmental constitutionalism focusing on Asia Pacific.



ROLE OF THE JUDICIARY IN ENVIRONMENTAL CONSTITUTIONALISM

The current state of affairs ... reveals a wholesale failure of the legal system to protect humanity from the collapse of finite natural resources by the uncontrolled pursuit of short-term profits [T]he modern judiciary has enfeebled itself to the point that law enforcement can rarely be accomplished by taking environmental predators to court. ... The third branch can, and should, take another long and careful look at the barriers to litigation created by modern doctrines of subject-matter jurisdiction and deference to the legislative and administrative branches of government."

(Juliana v. Obama (D. Or. 2016), citing Alfred T. Goodwin, *A Wake-Up Call/or Judges*, 2015 Wis. L. Rev. 785, 785-86, 788 (2015)).

Judges -- whether in specialized constitutional courts, environmental tribunals, or through diffuse systems of judicial review-- are issuing consequential results in environmental constitutionalism with more frequency, sometimes in ways that are breathtaking in breadth and depth. This is true whether or not the relevant constitutions explicitly protect the environment. Indeed, domestic courts with constitutional jurisdiction are uniquely situated to provide impactful decisions that will be respected and implemented. More than their international counterparts, these tribunals tend to be more easily accessible to putative plaintiffs, who are more likely to have better access to local lawyers who, in turn, are more likely to have expertise in the relevant legal fields and to know the legal and political landscape against which judges make their decisions. National courts are dedicated to enforcing constitutional values from within the political culture rather than outside of it, as is the case with international or regional bodies. Domestic judges are also more likely to understand the significance of a particular environmental claim—or of the countervailing claims—because they are part of the culture from which the claims emerge. As a result, the judicial response to an environmental claim, even if on some occasions it is outside the mainstream, is likely to be within the realm of local political possibility. This contributes to a more coherent and culturally relevant development of the law that in turn is more likely to be followed by other judges and to be accepted by the relevant stakeholders. And although judges in many countries can be relatively immune from political accountability, there is in the domestic sphere at least the greater possibility or threat of accountability than exists with international and regional tribunals. Moreover, given the enhanced concern that international tribunals have for uniformity and the deference they owe to their national constituencies, courts may be better able than their international counterparts to adjust requirements for standing, or develop different evidentiary requirements, or standards of proof for environmental claims.

Yet adjudicating environmental constitutionalism can be complex and ridden with obstacles. The reasons are multifaceted but often begin with the text of the provisions themselves which invariably triggers orbiting issues of what is protected, who can protect it, what constitutes an offense, and who is responsible for making things better, among other questions. Even the operative word – environment – can be challenging to interpret: 'environment' can be

virtually limitless, affecting human lives, dignity, health, housing, access to food and water, and livelihood, and so on. But it can also be biocentric, encompassing flora, fauna, and so on. Yet the term 'environment' is rarely if ever defined, so that it is not clear whether it includes air, water, soil, or any combination of these.

The adjectives used in these provisions can also be difficult to interpret. While there may be a difference between an environment that is "beneficial," or "adequate," or "healthful," or "quality," jurists are often at pains to describe it. Nor is the scope of the right delimited or defined. Consequently it is often up to the courts to determine what it means for the environment to achieve these ends and by whose perspective and how those qualities should be measured.

Identifying appropriate constitutional parties is another challenge. In some countries, the guarantee is for the benefit of people's health or their prosperity, while in others, the right extends to nature itself. Courts have also held private parties accountable for violations of constitutionally embedded environmental rights provisions. The question of identifying proper defendants may turn on the proper definition of the right but it is further complicated because it implicates questions of sovereignty, immunity, extra-territoriality, and the horizontal application of constitutional rights.

Identifying the appropriate constitutional remedy can be problematic, too. In most constitutional litigation, the question of remedies is relatively straightforward. Even in some environmental cases, where the defendant's action caused the plaintiff's injury (as in a nuisance case), courts have ordered the defendant to cease or to pay damages sufficient to cover the costs of medical care or the loss of employment income, for instance. Remedying constitutional violations involving environmental matters, however, invariably presents difficult and far-reaching policy choices that are challenging to judicial resolution. And when government changes its policy to enhance the environment, it is private individuals who bear the burden even if they indirectly benefit from improved environmental quality. In addition, once plaintiffs have effectively invoked judicial authority, the burdens of enforcement can be enormous.

Political realities affect outcomes, too. Most courts are keenly aware of the limitations of their own power—of the fact, namely, that respect for compliance rests on their own legitimacy. Eloquent exposition alone cannot change a societal structure that does not recognize the rule of law, for example, or that values development and economic progress at the expense of environmental protection.

The complexities are not simply matters of definition and interpretation. Rather, they inhere in the nature of environmental rights, especially at the constitutional level. Vindicating environmental rights presents even more fundamental questions of policy choices. In some ways, environmental rights are similar to other social and economic rights in that remedying their violation often entails expenditure of significant resources. But environmental rights often pit the human rights claims against each other. Protecting the environment can help preserve the way of life for some, but it can impair the way of life for others. The problem is one of proportion requiring careful balancing. The judgment of how to balance the competing claims is one that should typically be done politically and not judicially. But of course, staying out of the fray has substantive consequences that contribute to the continued deterioration of the environment: where there is no judicial resolution, the harm

may be irremediable.

Adjudicating environmental constitutionalism can also invert the normal expectations relating to the roles of public and private parties. Whereas traditional constitutional rights litigation pits the private individual against the public authority, environmental litigation often pits members of the public against a private entity (thus invoking the principle of the horizontal application of constitutional rights and obligations). Moreover, in many of these cases, private individuals are asserting public rights, whereas the government (through lenient regulation and licensing) is facilitating private gain.

Despite these challenges, the courts around the world are increasingly vindicating rights in a wide variety of settings, from mining to water and air pollution, to climate justice. And new rights are continually being recognized. In some countries, courts have been willing to expand the universe of possible plaintiffs precisely to enhance the control that the people (via the courts) have over the government. Courts in India, Pakistan, Bangladesh, and Nepal have recognised a form of open standing to vindicate environmental harms on behalf of the public interest. Some courts in Latin America allow amparo actions (or *acciones de inconstitucionalidad*), permitting any citizen to enforce constitutional rights. Courts in the Philippines and Argentina ease or waive standing and bonding requirements for those pursuing public interest litigation to vindicate constitutional environmental rights. And courts are increasingly expanding the class of litigants by recognizing the independent rights of nature.

Nor have courts shied away from hearing cases in novel realms of environmental constitutionalism, such as concerning water rights. In part, this reflects explicit language in so many of the world's constitutions that seeks to protect and manage water resources as an incident of sovereignty, as a human right, or as an essential element of a healthy ecology. And in part, it reflects the growing muscularity of constitutional courts around the world, especially in Southeast Asia and Latin America — where water resources are both threatened and scarce — along with the growing recognition in both national and international arenas of the importance of water to human life and dignity and to the world's ecosystems.

Courts have engaged environmental constitutionalism perhaps because they appreciate that through coordination with other parts of government and in dialogue with both the public and private sectors, they can play a pivotal role in securing environmental rights. Indeed, some courts have been extraordinarily creative in designing remedies that are ambitious enough to be effective in remedying the environmental damage, yet defined and limited enough that defendants can implement them.

Environmental constitutionalism's inherent ambiguities may suggest that environmental rights are so laden with policy as to be not justiciable, but better left to legislative bodies. Costs also exacerbate judicial recognition of environmental constitutionalism. And yet, social and economic rights are usually seen as well worth the costs: providing a health benefit to a class of patients or improving educational opportunities for a group of students produces palpable and indispensable benefits.

Environmental protection is problematic on both sides of the cost-benefit ledger. It can be far more costly than the vindication of other rights both in terms of outlays, including the

cost of cleaning up toxic sites or large bodies of water, and in terms of lost revenues, where, for instance, a mining or timber license is canceled or where tax revenues from industrial development is foregone. At the same time, environmental constitutionalism can be less palpably beneficial: saving a virgin forest may produce psychic benefits for the population as a whole or for future generations, but it is unlikely to benefit any particular individual or group of individuals enough to be appreciated, particularly at reelection time. As hard as it is to prove illness from the fact of environmental violations, it is much harder to attribute good health to environmental protection.

There is also the potential that judicial vindication of environmental constitutionalism can contribute to adverse societal outcomes. If protecting against soil or water pollution means closing down a factory or increasing regulation of a whole industry, environmentalists may applaud the result, but poor residents may be less sanguine about it if they lose the jobs and benefits associated with private enterprise investing in the community. And increased poverty can produce environmental degradation of a different but often equally pernicious sort.

Those courts that have engaged these provisions have varied in where they draw the line: some would allow environmental degradation in the name of private rights unless it seems neglectful or vindictive, others have privileged development over almost other interests, while still others have done the opposite, taking a strong stand in favor of the ecological interests of present and future generations. For instance, in invalidating a gold mining and processing license, the highest administrative court in Turkey found it "obvious that the public interest is to be interpreted in favour of human life, if one compares the economic gains attainable upon completion of the activities with the damage that will be caused by the risk to the environment and directly or indirectly to human life." But it is not, in fact, obvious how the court reached this conclusion, appealing though it may be. The court provided no rubric and referred to no controlling authority. But courts that engage environmental constitutionalism have to draw lines somewhere. Thus, what starts out as a constitutional right built on aspirations and high principles often becomes, in the hands of courts, a distinctly pragmatic evaluation of costs and benefits, constrained by limited judicial power considered in the face of towering political, economic, and social pressures. While most of these concerns resonate in all constitutional litigation, they are inescapable and particularly salient in constitutional environmental rights cases.

Environmental constitutionalism presents even deeper challenges than other constitutional claims because the particular type of balancing that it demands, some argue, is political and therefore especially unsuited to judicial resolution. The Kenyan Supreme Court explained the challenge of balancing this way: "We do not want a situation where our constitutional terrain on which human and property rights systems are rooted, cultivated and exploited for short term political, economic or cultural gains and satisfaction for a mere maximization of temporary economic returns, based on development strategies and legal arrangements for land ownership use and exploitation without taking account of ecological principles and the centrality of long term natural resources conservation rooted in a conservation national ethic."

Indeed, judicial discretion in the context of environmental constitutionalism often raises several of the concerns that actually define what is known as the political question doctrine in American law. As the U.S. Supreme Court explained in Baker v Carr, the political question

doctrine precludes judicial cognizance of an issue when there is "a lack of judicially discoverable and manageable standards for resolving it; or the impossibility of deciding without an initial policy determination of a kind clearly for nonjudicial discretion; or the impossibility of a court's undertaking independent resolution without expressing lack of the respect due coordinate branches of government" among other things. How can a court discern the legal standard embedded in the right "to live in an environment free of pollution?" How could it manage the standard to ensure continuing compliance with its order over time? And how, as a practical matter of judicial politics, could it enforce that judgment against public and private actors who have different views and who are beholden to a public that may be equally divided? Although courts around the world do not typically expressly invoke the American political question doctrine, their reluctance to engage with fundamental environmental rights may be attributable to the same concerns: institutional bodies with frail historical legitimacy and with neither police power nor economic muscle to back up their orders are reluctant to try to force coordinate branches to make radical policy changes.

And yet, courts in many parts of the world have moved beyond this particularly limited way of thinking: throughout Latin America, in Europe, in parts of Africa, and in the Indian sub-continent, courts have engaged not only with environmental constitutionalism but also with other socio-economic rights, including the right to health care, to housing, and to education, in ways that were previously thought of as within the exclusive sphere of political authorities. Equally interesting, these courts have engaged with no less enthusiasm constitutional provisions such as those protecting the right to dignity and the right to life, which can be as amorphous and ill-defined as environmental provisions, if not more so. (It is worth noting, however, that while there is significant overlap between the countries whose courts protect environmental rights and those whose courts protect other socio-economic rights, European countries are outliers: the constitutional courts of Europe have tended to protect environmental interests anemically if at all, while giving robust protection to most other socio-economic rights and values.)

To be sure, countries with democratic deficits are likely to be those that lack judicial review as well. But constitutional activity does not thwart democratic discourse or the ability of the people to mark their own paths: democracy is hardly moribund in countries such as South Africa, Colombia, Brazil, India, Pakistan, Bangladesh, Israel, Canada, and Germany, all of which have courts that energetically enforce a wide range of constitutional norms. The experiences in these countries suggest the opposite. In part, this is because constitutionalization and its partner, judicialization, do not remove issues from the political process, but rather help to galvanize public discourse by setting the terms of debate.

At most, rights in constitutions provide a sort of ballast or counterweight to other constitutional rights to ensure that particular values get counted in the political calculation. For example, where no countervailing values are at issue, environmental rights will often prevail. But where, as is often the case, other constitutional values such as property are in play, environmental rights must be balanced against those. As courts construct and reconfigure their roles within developing systems of democratic constitutionalism, the rights they protect become the subject of ongoing political negotiation, rather than falling outside of it. This kind of balancing is likely to be more in line with the political community's values and expectations when it is done by constitutional courts, rather than by international or regional tribunals. Judges will invariably root their application of equity in the choices

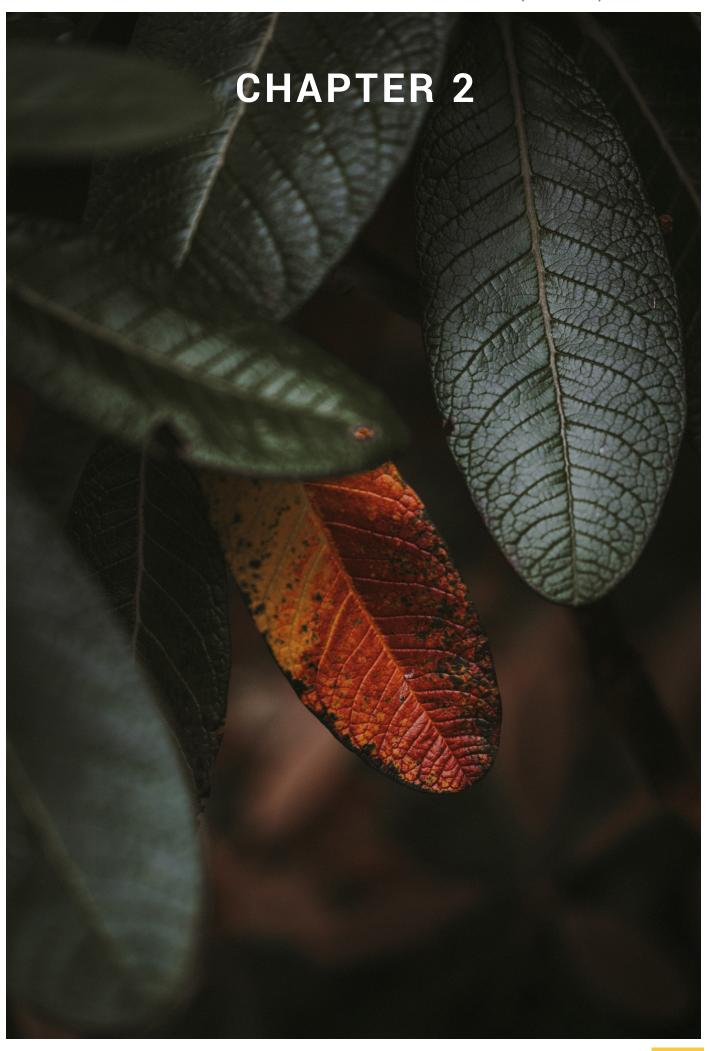
of their national collective. Each court will define its own "conservation national ethic" according to the nation's own traditions and needs. It will give meaning to a 'clean' or 'healthy' environment in a way that is consistent with the country's own cultural values or will weigh the value of development against the protection of nature in a way that is tolerable to the competing claimants within the society. This promotes environmental rule of law within the political and legal culture of a country.

Moreover, judicial discretion diminishes over time, as legal principles become settled and case law gives substance to those amorphous terms. When courts implement environmental rights in particular, they tend to import many of the principles and values of environmental law that have become widely accepted throughout the world in similar cases, such as the precautionary principle, the principle that the polluter should pay for the damage, principles of sustainable development and intergenerational equity, and sometimes procedural principles that are unique to environmental litigation including the reversal of the burden of proof and the acceptance of probabilistic evidence. The incremental growth of a body of law through case-by-case application can ensure that the law develops progressively and relatively smoothly over time and this, in turn, increases its acceptance in the local society.

That some constitutional provisions remain underutilized or jurically dormant is perhaps less consequential than it might seem at first blush. Even where courts have not found a constitutional environmental violation, the mere fact that such arguments are being made and considered augments the attention that environmental constitutionalism receives in public discourse. And this, in itself, can contribute to the success of environmental outcomes in meaningful ways. Given the complexity of the issues involved—the necessary involvement of all branches of government as well as a multiplicity of private and public actors in all facets of public life—the judicial role will be necessary, though not sufficient, to implement the progress and protections promised by environmental constitutionalism.

The environmental rights provision of the constitution of the state of Pennsylvania, one of the world's earliest such provision having been adopted by referendum in 1971, for instance, was ignored and repudiated until 2013 when the state Supreme Court finally reinvigorated it. And increasingly state, national, and green courts in different parts of the world are, with some impatience at the intransigence of the political branches, taking stronger measures to compel government action to protect the planet and its inhabitants.

Environmental constitutionalism is pervasive and profound: it furthers the possibilities of constitutional reformation, notions of intergenerational equity, legislative responses to environmental challenges, and the need for policy decisions to be made through open and inclusive processes. Environmental constitutionalism also serves as a proxy for social compacts with present and future generations. While imperfect and imprecise, it gives judges additional tools for advancing social and environmental justice under the rule of law.



A TAXONOMY OF ENVIRONMENTAL CONSTITUTIONALISM

Such a right belongs to a different category of rights altogether for it concerns nothing less than self-preservation and self-perpetuation . . . the advancement of which may even be said to predate all governments and constitutions. As a matter of fact, these basic rights need not even be written in the Constitution for they are assumed to exist from the inception of humankind.

Minors Oposa v. Factoran Jr. (Sup. Ct. of the Philippines, 1994)

Since the Stockholm Declaration of 1972 linking human rights and environmental protection, dozens of countries have adopted provisions addressing environmental matters in some way, sometimes spectacularly. In what has been called an environmental rights 'revolution,' the constitutions of about three-quarters of nations worldwide – inhabited by the majority of the planet's inhabitants - address environmental matters in some fashion. Approximately 150 of the world's 193 UN members have constitutions from about 90 nations that expressly or implicitly recognize some kind of fundamental right to a quality environment, while a similar number imposes corresponding duties on individuals or the state to protect the environment, and about three dozen establish procedural rights in environmental matters. Constitutions also identify environmental protection as a matter of national policy, and some recognize specific rights concerning water, sustainability, nature, public trust and climate change. And that about two-thirds (126) of the constitutions in force address natural resources in some fashion, including water (63), land (62), fauna (59), minerals and mining (45), flora (42), biodiversity or ecosystem services (35), soil/sub-soil (34), air (28), nature (27), energy (22), and other (17). Some countries have constitutions that do many if not most of these things, while others do none of them. Most fall somewhere in between.

The constitution of South Africa provides an example of environmental constitutionalism that incorporates individual and collective rights to a quality environment for present and future generations. It reads:

Everyone has the right[:]

- a. to an environment that is not harmful to their health or well-being; and
- b. to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that
 - i. prevent pollution and ecological degradation;
 - ii. promote conservation; and
- iii. secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

Other countries following similarly sophisticated approaches include France, in a 10-article constitutional charter of the environment, the Dominican Republic ("Every person has the right, both individually and collectively, to the sustainable use and enjoyment of the natural resources; to live in a healthy, ecologically balanced [equilibrado] and suitable environment for the development and preservation of the various forms of life, of the landscape and of nature"), East Timor ("All have the right to a humane, healthy, and ecologically balanced

environment and the duty to protect it and improve it for the benefit of the future generations"), Kenya ("Every person has the right to a clean and healthy environment, which includes the right—(a) to have the environment protected for the benefit of present and future generations through legislative and other measures ...; and (b) to have obligations relating to the environment fulfilled"), and South Sudan ("Every person shall have the right to have the environment protected for the benefit of present and future generations, through appropriate legislative action and other measures that: (a) prevent pollution and ecological degradation; (b) promote conservation; and (c) secure ecologically sustainable development and use of natural resources while promoting rational economic and social development so as to protect genetic stability and bio-diversity").

This chapter focuses on the primary substantive and procedural strains of environmental constitutionalism. It then reports briefly on other forms of environmental constitutionalism, including duties and obligations, water rights, rights of nature. It concludes with a brief survey of subnational environmental constitutionalism, highlighting developments in Brazil and the United States.

A. Substantive Rights

Fundamental environmental rights are those that recognize a right to some degree of environmental quality, such as a right to an 'adequate,' 'clean,' 'healthy,' 'productive,' 'harmonious,' or 'sustainable' environment. Moreover, environmental rights have been recognized as an aspect of non-environmental substantive rights, such as the right to life and dignity.

There is good reason that substantive environmental rights are common. As a general matter, substantive rights can be effective because they are often viewed as being self-executing and enforceable, are less susceptible to political change, and more likely to endure. Substantive environmental rights, therefore, afford the most durable and enforceable means for environmental protection.

Despite the relative commendations of substantive environmental rights, few countries had even considered amending or adopting constitutions to recognize an express substantive right to a quality environment prior to Stockholm in 1972. Yet since then, provisions that recognize some sort of substantive right to a quality environment run the gamut from spare to spectacular and much in between. Straightforward provisions are reflected in the constitutions of Benin ("Every person has the right to a healthy, satisfactory and sustainable environment and has the duty to defend it"), Chile ("All have ... The right to live in an environment free from contamination"), Colombia ("Every individual has the right to enjoy a healthy environment"), Costa Rica ("Every person has the right to a healthy and ecologically balanced environment"), Montenegro ("Everyone shall have the right to a sound environment"), Mozambique ("All citizens shall have the right to live in . . . a balanced natural environment"), Nepal ("Every person shall have the right to live in a clean environment",) Paraguay ("Everyone has the right to live in a healthy, ecologically balanced environment"), South Korea ("All citizens have the right to a healthy and pleasant environment"), Spain ("Everyone has the right to enjoy an environment suitable for the development of the person"), Turkey ("Everyone has the right to live in a healthy, balanced environment"), Timor Leste ("All have the right to a humane, healthy, and ecologically balanced environment..."),

and Venezuela ("Every person has a right to individually and collectively enjoy a life and a safe, healthy and ecologically balanced environment").

Provisions in some countries are very specific, recognizing environmental constitutionalism for a select segment of the population. For example, countries that reserve substantive environmental rights for residents, women, children, indigenous populations, or future generations include Argentina ("All residents enjoy the right to a healthy, balanced environment which is fit for human development and by which productive activities satisfy current necessities without compromising those of future generations"), El Salvador ("Every child has the right to live in familial and environmental conditions that permit his integral development, for which he shall have the protection of the State"), and Madagascar ("The Fokonolona can take the appropriate measures tending to oppose acts susceptible to destroy their environment, dispossess them of their land, claim the traditional spaces allocated to their herds of cattle or claim their ceremonial heritage, unless these measures may undermine the general interest or public order").

Some countries connect substantive environmental rights to other national norms or rights. For example, countries that combine substantive rights to sustainable development or cultural advancement include Bolivia ("Everyone has the right to a healthy, protected, and balanced environment. The exercise of this right must be granted to individuals and collectives of present and future generations, as well as to other living things, so they may develop in a normal and permanent way"), Ecuador ("The right of the population to live in a healthy and ecologically balanced environment that guarantees sustainability and the good way of living (sumak kawsay), is recognized"), Georgia ("Everyone shall have the right to live in a healthy environment and enjoy natural and cultural surroundings"), and Greece ("The protection of the natural and cultural environment constitutes ... a right of every person"). Moreover, some constitutions connect environmental to other constitutionally protected human rights, such as rights to dignity, health, life, or shelter. Countries to have done so include Afghanistan ("ensuring a prosperous life and a sound environment for all those residing in this land"), Belgium ("Everyone has the right to lead a life worthy of human dignity . . . [including] the right to enjoy the protection of a healthy environment"), Brazil ("All persons are entitled to an ecologically balanced environment, which is an asset for the people's common use and is essential to a healthy life"), Guinea-Bissau ("The object of public health shall be to . . . encourage [the people's] balanced integration into the social ecological sphere in which they live"), Moldova ("Every person (om) has the right to an environment that is ecologically safe for life and health"), Sao Tomé & Príncipe ("All have the right to housing and to an environment of human life"), and Norway ("Every person has a right to an environment that is conducive to health and to natural surroundings whose productivity and diversity are preserved.").

Other constitutions place environmental rights near separate but related rights, such as a right to health. These include Croatia ("Everyone shall have the right to a healthy life"), Guatemala ("The right to health is a fundamental right of the human being without any discrimination"), and Honduras ("The right to the protection of one's health is hereby recognized"). Such co-constitutionalism has a synergistic effect, fortifying substantive environmental rights.

Substantive environmental rights have also found their way into some countries that have not as yet adopted an express right to a quality environment. Constitutional and apex courts

in some countries have derived substantive environmental rights from other constitutional guarantees, such as a right to life. Courts in India have most commonly enlisted a "right to life" as implying rights to a quality environment, as well as other socioeconomic rights and courts in Pakistan have twinned the right to life and the right to dignity with environmental protection.

B. Procedural Environmental Rights

A constitutional guarantee to a beneficial environment is more likely to take root when stakeholders have the right to receive free and timely information for, participate in deliberations about, and appeal to government agencies granting permission to, for example, dam a wild river, emit mercury-laden air pollutants near an elementary school, clearcut a forest that provides habitat for endangered megafauna, or inexorably alter scenic landscape. Approximately three dozen countries in the last thirty years have constitutionalized procedural rights in environmental matters as a means of complementing or supplementing other constitutional, legislative, and regulatory norms. (In other countries, general procedural quarantees in constitutions have been applied to environmental claims).

Procedural environmental rights consist of three 'pillars', allowing for rights to information, participation, and access to justice. These pillars work in tandem to help ensure better decisionmaking in environmental matters. First, informational rights include access to timely and reliable information from governmental agencies charged with overseeing activities that affect the environment. Second, participatory rights enable stakeholders to shape governmental decisions in environmental matters, including permission to submit comments, ask questions, and attend and participate in public meetings. Third, adjudicatory rights allow stakeholders to seek civil mediation and enforce court orders in the face of recalcitrant or improvident government action in environmental matters. Collectively, such process rights can raise awareness, provide opportunities to participate, foster empowerment, strengthen local communities, facilitate government accountability, increase public acceptance of decisions, and contribute to the legitimacy of governmental action. Procedural rights can also promote discourse and democratization through concomitant rights to assemble, speak, and participate in governance.

Most countries that guarantee procedural environmental rights constitutionally contain a companion provision that guarantees a substantive right to a quality environment. This suggests that procedural environmental rights in those countries are designed to complement substantive environmental rights. Brazil's constitution, for instance, protects the substantive right "to an ecologically balanced environment" but also imposes obligations on the government to "ensure the effectiveness of this right," including the obligation to demand and make public environmental impact studies. The French constitutional bloc incorporates the 2004 Charter of the Environment, which guarantees that "every person has the right, under conditions and limits defined by law, to access information relative to the environment that is held by government authorities and to participate in the development of public decisions having an impact on the environment."

C. Other Aspects of Environmental Constitutionalism

1. Environmental Obligations, Duties and Policies

Almost one-half of national constitutions impose an individual duty to protect or defend the environment, although there are few examples of judicial engagement with these provisions.

Several constitutions expressly advance environmental policy or impose duties upon the state or state actors. Policy directives are intended to influence governmental decision-making but are generally not judicially enforceable. For example, Uruguay's constitution contains a policy directive that "[t]he protection of the environment is of common interest." The Constitution of Qatar provides that "[t]he State endeavors to protect the environment and its natural balance, to achieve comprehensive and sustainable development for all generations." Many Asian constitutions express environmental values in this way, including, for instance, the constitutions of Bangladesh ("The state shall endeavour to protect and improve the environment and to preserve and safeguard national resources, biodiversity, wetlands, forests and wildlife for the present and future citizens"), Bhutan ("The Royal Government shall ... secure ecologically balanced sustainable development while promoting justifiable economic and social development"), Papua New Guinea ("We declare our fourth goal to be for Papua New Guinea's natural resources and environment to be conserved and used for the collective benefit of us all, and be replenished for the benefit of future generations"), and Maldives ("The state has a fundamental duty to protect and preserve the natural environment, biodiversity, resources and beauty of the country for the benefit of present and future generations.").

Even though they are not directly judicially enforceable, such constitutional policy directives can be instrumental in establishing environmental norms; they loomed large, for example, in saving Greece's famed Acheloos River from being dammed beyond recognition.

Some constitutions allow the government to elevate environmental values over others. Some allow the government to restrict private property rights in favor of environmental policies. Others elevate environmental values over some or all other rights in favor of the environment: Chile's constitution establishes that "The law can establish specific restrictions on the exercise of certain rights or freedoms in order to protect the environment."

Most constitutions link environmental duties and rights, suggesting a symbiotic relationship between the two.

2. Rights to Water

The term "water" or "waters" appears in the constitutions of almost half the countries of the world, cumulatively more than 300 times. While most of these references are concerned with governmental authority to control and allocate water resources, about 30 constitutions provide for a human right to water or an environmental right to clean water. Some constitutional provisions guarantee a right to a quantity of water for drinking or irrigation, for example. Generally, these provisions can be thought of as providing a human right to

water. Other provisions are qualitative, for instance guaranteeing rights to unpolluted water. Under the Philippine constitution, "The state shall protect the nation's marine wealth in its archipalegic waters, territorial sea, and exclusive economic zone, and reserve its use and enjoyment exclusively to Filipino citizens." Many other constitutions refer to or seek to protect national fresh and ocean waters.

In general, these provisions track the twin paths for managing water resources at the international level. The principles developed through regional and international systems to protect water resources as both a human and environmental right are often seamlessly and implicitly integrated into domestic constitutional law. For instance, Australia's constitution prohibits the Commonwealth from abridging "the right of a State or the residents therein to the reasonable use of the waters of rivers for conservation or irrigation."

Still, constitutional water cases tend to rely less on international law than other constitutional environmental cases simply because the international body of law relating to the human and environmental rights to water is less developed than it is for environmental rights generally.

3. Rights of Nature

Environmental constitutionalism addressing nature appears as either governmental duties or substantive rights of nature; increasingly, it has been implied where the text does not make it explicit. First, the constitutions of some countries require all branches of government to protect nature. Germany's constitution, for instance, requires the government to protect "the natural bases of life and the animals within the framework of the constitutional order by legislation, and in accordance with law and justice, by executive and judicial power."

Second, biocentric environmental constitutionalism—recognizing the *right of nature*—has been pushed most emphatically so far by a few countries in South America. In 2008, Ecuador amended its constitution to recognize the right of nature, providing that: "Nature, or Pachamama, where life is reproduced and created, has the right to integral respect for her existence, her maintenance, and for the regeneration of her vital cycles, structure, functions, and evolutionary processes." In a nine-paragraph chapter devoted exclusively to the rights of nature, the Ecuadorian constitution invites implementation of the provision by empowering each "person, community, people, or nationality" to exercise public authority to enforce the right, according to normal constitutional processes. Bolivia has a framework law recognizing the rights of nature, and most recently, the Colombian Supreme Court held that a river has rights that must be protected. Outside the region, a High Court in India has recognized the rights of rivers, glaciers, and other bodies of water in two recent landmark decisions.

4. Sustainability and Public Trust

Environmental sustainability promotes the idea that those who are presently alive should consume natural resources at a rate and in a way so as to preserve comparable opportunities for future generations; in other words, as the Native American proverb says: "We do not inherit the Earth from our ancestors: we borrow it from our children."

'Sustainability' has witnessed an astonishing pattern of development. Since the concept was first promoted as a single-sentence principle of international law at the Stockholm Conference in 1972, it is now a common if not ubiquitous feature in legal expressions at the international, national and subnational levels, culminating in 17 Sustainable Development Goals the United Nations (UN) established in 2015, to be achieved by 2030.

Sustainability has also infiltrated constitutionalism around the globe. Presently, more than three-dozen countries incorporate sustainability in their constitutions by advancing 'sustainable development,' the interests of 'future generations,' or some combination of these themes. In addition to some of the other constitutions quoted above, these include Belgium ("pursue the objectives of sustainable development in its social, economic and environmental aspects") and the Dominican Republic ("nonrenewable natural resources, can only be explored and exploited by individuals, under sustainable environmental criteria . ." and provides for the protection of the environment "for the benefit of the present and future generations …"). These constitutional provisions help bridge the gap left by international and domestic laws, even given the array of sustainability provisions already in existence.

Related to the modern notion of sustainability, the public trust doctrine derives from the ancient notion that the sovereign holds certain natural resources and objects of nature in trust for the benefit of current and future generations. The doctrine is "rooted in the precept that some resources are so central to the well-being of the community that they must be protected by distinctive, judge-made principles."

5. Climate Change

Climate change is perhaps the most complex and important environmental challenges of our day. Climate change is at least somewhat attributable to anthropogenic greenhouse gas (GHG) emissions from the use and combustion of fossil fuels. Thus far, however, very few countries have seen fit to address climate change constitutionally. The constitution of the island nation of the Dominican Republic is explicit on the point, with a provision under "The Organization of the Territory" that provides for a "plan of territorial ordering that assures the efficient and sustainable use of the natural resources of the Nation, in accordance with the need of adaptation to climate change. . ." Tunisia's constitution also addresses climate change. Even with recent advances in international protection against climate change, one might expect to see more countries elect to entrench express constitutional measures, perhaps to track national intended contributions that have become a particularly important part of international law with the adoption of the Paris Climate Accord of 2015 and the Marrakech Accord of 2016.

Although climate change is, of course, a global issue requiring concerted and coordinated global efforts adjunct to mitigation, adaptation, and compensation, its effects are absorbed locally by nations in response to sea level rise, loss of shoreline, drought, severe weather, and other consequences often attributed to climate change. These local effects are where environmental constitutionalism might play an important if limited role. Constitutions can direct governments to enact and implement policies to address the effects of climate change in ways not accomplished through existing international and national laws or that track international law or the nationally intended contributions. Once absorbed into constitutional texts, courts can impel action by enforcing these provisions even through progressive realization. However, courts are increasingly incorporating a right to protection

against climate change even in the absence of a direct constitutional mandate. This issue is discussed at greater length in Chapter 7.

6. Dignity

As constitutional courts are increasingly turning their attention to environmental rights cases, they are recognizing the deeply enmeshed relationships between a healthy environment and the enjoyment of other human rights. Only Belgium's constitution so far makes this explicit, but courts around the world are beginning to acknowledge the connection. In particular, as the parallel jurisprudence of dignity is developing in constitutional tribunals throughout the world — not as a stand-in for all other human rights, but in order to protect the essence of human dignity, as such —, the tight link between the full development of one's personality, one's ability to live a decent life, and one's inclusion and participation one's affective, social, cultural, and political communities — all interests and values that are integral to the constitutional respect for human dignity — is becoming more evident to litigants and to jurists. Recent cases from Peru, Nepal, Nigeria, and Pakistan all provide examples of the imbrications of dignity and environmental protection, and of a national commitment to advancing both indivisibly. This issue is discussed at greater length in Chapter 6.

D. Subnational Environmental Constitutionalism

Standards in environmental constitutionalism can emanate from subnational sources, including states, provinces, municipalities and additional meso-levels of governance that exist between the national and local governments. Subnational governments around the globe have constitutionalized substantive and procedural environmental rights, environmental duties, and sustainable development for present and future generations, sometimes more elaborately than in national constitutions.

The Brazilian brand of subnational environmental constitutionalism is especially striking. The constitutions for all of Brazil's 26 states—and the Federal District—promote environmental protection, often in intricate ways. State constitutions delineate extensive governmental functions in the service of substantive environmental rights, including promoting biodiversity and sustainability, protecting species and water quality, advancing conservation and environmental education, and enforcing environmental requirements. The Mato Grasso constitution is typical, touching all corners of environmental constitutionalism by guaranteeing substantive and procedural rights and imposing duties and responsibilities that apply to all for the benefit of present and future generations.

Notably, the constitutions of most Brazilian states and the Federal District embed a substantive right to a quality environment in some form, most commonly to a "balanced" environment. For example, the constitution of the State of Acre provides that "[a]ll have the right to an ecologically balanced environment." Amapá's provides that "All have the right to an ecologically balanced environment, which is an asset of common use and essential to a healthy quality of life." Amazonas' says that "[a]ll have the right to a balanced environment, essential to a healthy quality of life." Ceará's constitution refers to a "balanced environment" as an "inalienable right." Goiás' constitution guarantees "an ecologically balanced environment." Mato Grosso's says that: "All have the right to an ecologically balanced environment." Maranhão's calls a balanced environment "an asset of common use and essential to people's quality of life, imposing to all, and especially the State and

the Municipalities, the duty to ensure their preservation and restoration for the benefit of present generations and future." Similar provisions recognizing a substantive right to a balanced environment are found in the constitutions of the States of Bahia, Espírito Santo, Goiás, Maranhão, Minas Gerais, Paraíba, Paraná, Piauí, Rio de Janeiro, Rio Grande do Sul, Rio Grande do Norte, Santa Catarina, Sergipe, and Tocantins, and in the Federal District. A couple of states vary slightly from the "balanced" formulae, including Mato Grosso Sol, which provides that "All have the right to enjoy an environment free of physical and social factors harmful to health."

The constitutions for most Brazilian states express environmental rights in terms of duties and responsibilities that are owed by all for the benefit of present and future generations. For example, Espírito Santo's constitution reads: "All have the right to an ecologically, healthy and balanced environment, and it is incumbent upon them and in particular to the State and the Municipalities, to ensure its preservation, conservation and restoration for the benefit of present and future generations." Likewise, Mato Grasso's constitution imposes a duty on the state, municipalities, and "the community" "to defend and preserve" the environment "for present and future generations," while Acre's says that "both the State and the community shall defend [the environment] and preserve it for present and future generations," and Amapá's that "both the Government and the community shall have the duty to defend and preserve it for present and future generations."

The constitutions of some Brazilian states specifically elevate the interests of nature. For example, Bahia's says that "[i]t is incumbent upon the State, beyond all powers that are not prohibited by the Federal Constitution, to . . . protect the environment and fight pollution in any of its forms, preserving the forests, fauna and flora." It remains to be seen whether provisions such as this create a "right" on behalf of nature.

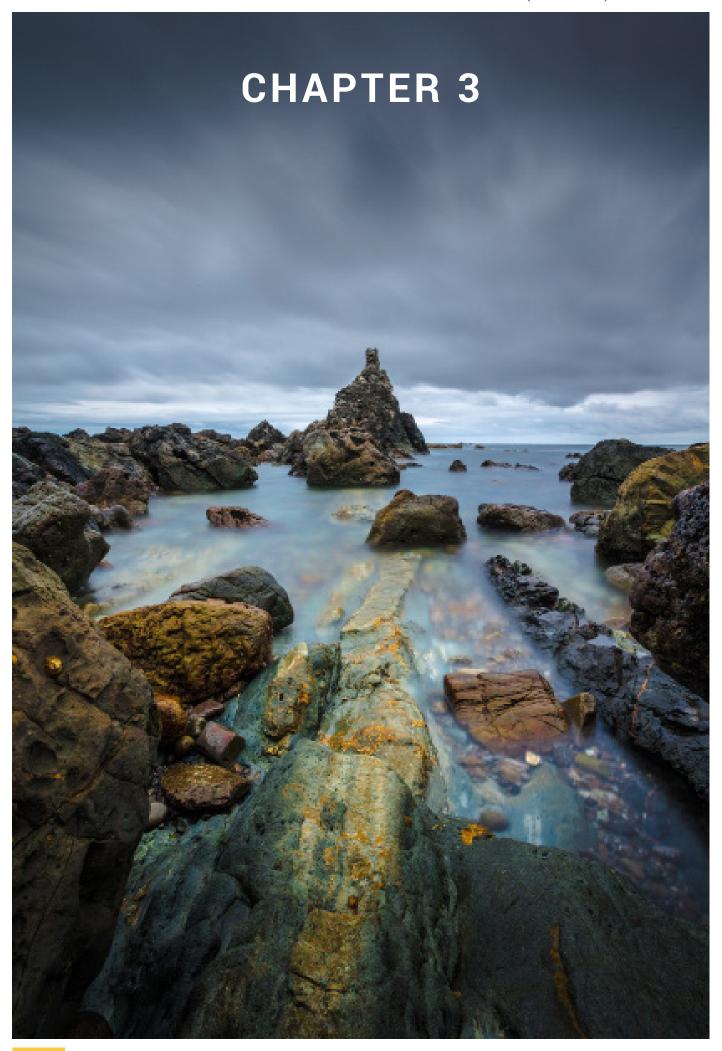
Most Brazilian states similarly dictate governmental means for implementing substantive environmental rights, including the States of Amazonas, Bahia, Espírito Santo, Goiás, Maranhão, Mato Grosso do Sul, Minas Gerais, Paraíba, Paraná, Piauí, Rio de Janeiro, Rio Grande do Sul, Rio Grande do Norte, Santa Catarina, Sergipe, and Tocantins, and in the Federal District.

Subnational protection for environmental rights in the United States is instructive because it underscores both the potential and the limitations of environmental constitutionalism. While all efforts to amend the U.S. Constitution to recognize environmental rights have failed, states in the United States have a long tradition of constitutionalizing environmental protection.

Presently, there are at least 207 natural resource or environment-related provisions in 46 (out of 50) state constitutions. These provisions reach 19 different categories of natural resources or the environment, including water, timber and minerals. They take 11 different forms, including general policy statements, legislative directives, and individual rights to a quality environment. States recognizing environmental protection as an overarching state policy include Louisiana, Michigan, Ohio, South Carolina, and Virginia. Several more address particular environmental concerns, such as access to water, preservation, re-development, sustainability, pollution abatement, climate change, energy reform, or environmental rights. Dozens more contain provisions fairly characterized as recognizing that the state holds state resources in "public trust."

Currently, five state constitutions include a substantive right to a quality environment: Hawaii, Illinois, Massachusetts, Montana, and Pennsylvania. These provisions are independent of state laws that allow citizens to enforce pollution control statutes.

While most of these five provide a "right" to the "environment," the adjectival objective – "clean" or "healthful" or "quality" – differs from state to state. For example, Hawaii's and Montana's constitutions aim to afford a "clean and healthful environment," Illinois' "a right to a healthful environment," Massachusetts' a "right to clean air and water, freedom from excessive and unnecessary noise, and the natural, scenic, historic, and esthetic qualities of their environment," and Pennsylvania's "a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment."



JUSTICIABILITY OF ENVIRONMENTAL CONSTITUTIONALISM

"[T]he degradation of the environment and its progressive destruction have the capacity to alter the conditions that have permitted the development of man and to condemn us to the loss of the quality of life, for ourselves and our descendents and eventually the disappearance of the human species."

Colombian Constitutional Court, 2010

"To hold otherwise would be to say that the Constitution affords no protection against a government's knowing decision to poison the air its citizens breathe or the water its citizens drink.... [U.S.] Federal courts too often have been cautious and overly deferential in the arena of environmental law, and the world has suffered for it." United States Federal District Court, 2016

"[T]he harms caused to the environment are the grand theme of the twenty-first century, and it is a duty of all to join together so that these harms are prevented, since, once produced, they are as a practical matter, impossible to repair."

Argentina Supreme Court, 2010

"[The Constitution] allows any individual or organization to protect the rights of another even though that individual is not suffering the injury complained of or does not know that he is suffering from the alleged injury. To put it in the biblical sense the Article makes all of us our 'brother keeper.' In that sense it gives all the power to speak for those who cannot speak for their rights due to their ignorance, poverty or apathy. In that regard I cannot hide any pride to say that our constitution is among the best the world over because it emphasizes the point that violation of any human right or fundamental right of one person is violation of the right of all."

Uganda Supreme Court, 2004

This Chapter addresses matters that are central to the justiciability of environmental constitutionalism, including presumptions about justiciability, standing, rights of action, timing, and defenses.

A. Presumptions About Justiciability

Environmental constitutionalism is likely to be more effective when it is self-executing — that is, when it does not require interceding legislative action. Provisions are more likely to be held to be self-executing when they appear alongside other constitutional rights, for example, in a constitution's "Bill of Rights," or listing of fundamental rights or when they clearly indicate that the matter is a "right."

The constitutions of the majority of nations that have adopted substantive environmental

rights seem to classify them as self-executing. Countries in Central and Eastern Europe have led the way in this regard, including Azerbaijan, Albania, Belarus, Bulgaria, Croatia, Chechnya, Estonia, Georgia, Hungary, Montenegro, Romania, Russia, Moldova, Slovakia, Serbia, Slovenia, and Ukraine. Most countries with constitutional substantive environmental rights in Africa also place them among first generation rights, including Angola, Benin, Burkina Faso, Chad, Congo, Ethiopia, Mali, Niger, South Africa, Sudan, Togo, the island nations of Cape Verde, and Seychelles. Countries in Central and South America to do so include Argentina, Brazil, Ecuador, El Salvador, Guatemala, Honduras, and Venezuela. Other countries that appear to recognize substantive environmental rights as rights of the first order include Belgium and France. Countries in Asia to have done so include Kyrgyzstan and Mongolia. Such structural placement makes it more likely that such provisions are self-executing and enforceable.

Other provisions are written in such a way as to leave little doubt that they are self-executing, enforceable, and subject to redress without the need for intervening state action. Notably, constitutions from the former Soviet Bloc make it clear that affected parties can recover compensation for violations of environmental rights.

By contrast, placing substantive environmental rights within preambles, among general provisions, or in statements of general policy may suggest something other than a self-executing right. Nations that recognize substantive environmental rights in this fashion include Afghanistan, Algeria, Comoros, and Norway. Even though such provisions are usually not justiciable, they can still influence legislative, policy, and judicial interpretation. For instance, while Cameroon's constitution recognizes environmental rights in its Preamble, it also states that the provision is "part and parcel" of the remainder of the constitution.

But the constitutions of some countries are explicit that the right to a quality environment is not self-executing. The two most common variants require interceding state action, or are written so turgidly as to burden enforcement. First, enforceability in some countries seems to be conditioned on state action or implementation, rendering such rights unenforceable until executed by the state. Constitutions written in this vein include Finland ("The public authorities shall endeavor to guarantee for everyone the right to a healthy environment"), Hungary ("Hungary shall recognise and enforce the right of every person to a healthy environment"), Maldives ("Every citizen [has] the following rights pursuant to this Constitution, and the State undertakes to achieve the progressive realisation of these rights by reasonable measures within its ability and resources: . . . (d) a healthy and ecologically balanced environment"), Morocco ("The State, the public establishments and the territorial collectivities work for the mobilization of all the means available [disponibles] to facilitate the equal access of the citizens to conditions that permit their enjoyment of the right . . . to the access to water and to a healthy environment"), Seychelles ("The State recognises the right of every person to live in and enjoy a clean, healthy and ecologically balanced environment"), and Slovenia ("Everyone has the right in accordance with the law to a healthy living environment"). Such wording likely dilutes the efficacy of these rights at inception.

The variety of constitutional provisions, aiming to protect different aspects of the environment with a range of scaffolding and enforcement mechanisms, attests to the growth of environmental constitutionalism throughout the world in the last four decades. But the value of constitutional guarantees is measured not only by their textual manifestations

but perhaps even more importantly by the extent to which the rights are vindicable by the nation's courts. Predictions about justiciability tend to follow the same patterns as those pertaining to constitutionalizing environmental rights in the first place.

The proof about justicia bility, however, is revealed by examining judicial outcomes themselves. Even when rights have strong textual and structural footing, justicia bility is still a "judgment call," especially where provisions seem to be vague by design. Some courts are more prone to address constitutional environmental rights than others. Thus far, constitutional and apex courts in South America have been the most receptive to constitutional rights to a quality environment. For example, as of this writing, the Constitutional Court of Colombia has rendered at least 135 decisions in which the constitutional right to quality environment is addressed. The Asian region is close behind, with the Supreme Court of India having addressed environmental protection in a constitutional context more than 80 times since 1975. These outcomes correlate to the question of standing, to which we turn next.

B. Who Can Enforce Constitutional Environmental Rights?

Standing in Theory

Before a court reaches the merits of a constitutional claim, it will often consider the preliminary question of standing, or *locus standi*: whether the party who brought the suit has the right to invoke the court's jurisdiction. Most constitutional traditions have rules about who can initiate litigation, although they vary widely from country to country. Some systems limit who can challenge government action to certain members of the government or to an ombudsman, while others fling open the courthouse doors to anyone to seek judicial protection. These rules can have a dramatic effect on a nation's legal culture: where standing rules are broad and inviting, more people are encouraged to bring more cases to enforce more laws not only for their own private benefit but for the public good. Conversely, where courts restrict access to judicial fora, as they do typically in the United States, compliance with existing laws, as well as the progressive realization of constitutional promises, may be seen more as a matter of political discretion than of constitutional obligation. Countries that have broadened the scope of potential litigants, as has happened over the last few decades throughout South America and more recently in France, have seen noticeable increases in environmental constitutionalism.

Constitutional environmental cases challenge conventional standing practices. Even where constitutional review is open to members of the public, it has traditionally been limited to those who can assert well-recognized claims, including claims for harms recognized at common law (such as violations of property rights) or interests specifically identified in statutory provisions. In the United States, standing rules tend to reflect the principle that only individuals who are personally and particularly injured may invoke scarce judicial resources.

Environmental harms, by contrast, affect groups of people generally and similarly. They may affect a whole community or culture or, in the case of climate change, all of humanity. Even where an individual can claim a particular harm—such as, for example, where a toxic leak proves carcinogenic—it is most likely that the plaintiff is not the only person so affected but that a whole community is affected by a greater incidence of cancer; indeed, the plaintiff is

more likely to be able to show causation where the defendant's wrongful actions caused a broad-based injury rather than just her own illness. In even more difficult cases, the claim is based on the health not of an individual but of the environment in the abstract and may raise questions about environmental aesthetics or the health of a particular animal population that may not directly affect most people at all.

Some constitutions make the decision for the court, clearly delineating who may sue and who may not, either for all claims or specifically in environmental cases. In Spain, constitutional environmental rights are protected, but they are enforceable only when an ombudsman initiates litigation. The constitution of South Africa, too, adopts an open attitude toward standing, which is buttressed by legislation that reinforces the right of any person to approach the court to assert his or her own interest, the interest of another, or the public interest. The statutory authority to sue extends to suits on behalf of the environment.

In the absence of clear constitutional or statutory rules, a court confronting the question of whether a plaintiff who is not uniquely or particularly affected by defendant's actions can nonetheless sue the defendant must balance competing constitutional values. On the one hand, out of deference to the political process in any constitutional democracy, a court must be wary of allowing challenges to legislative and administrative policies which, after all, may be well reasoned or be required by political or economic exigencies that ought not be easily disturbed or which may require political solutions. This is particularly true in large environmental cases, which often challenge development, or extraction of natural resources or other economic activity, such as in the La Oroya case from Peru and the Godavari Marble case from Nepal. Moreover, in principle, decisions taken by political actors in a democracy are remediable in political arenas without the necessity of judicial intervention. And courts may feel that they must protect scarce judicial resources against the flood of litigation that would ensue if the courtroom doors were open to everyone. On the other hand, courts have also recognized that judicial recourse is the last resort to ensure that governments take environmental factors into account or protect the world's most vulnerable people from environmentally-induced injuries.

Opening Courthouse Doors, Protecting the Most Vulnerable

Throughout Latin America and parts of Asia, constitutions and courts have expanded the class of people who can seek judicial enforcement of constitutional rights and who can hold government accountable.

As far back as 1983, the Argentine courts had recognized "the right of any human being to protect his habitat" in a case seeking to protect the ecological equilibrium with respect to dolphins. The current constitution provides a right to "any person" to "file a prompt and summary proceeding regarding constitutional guarantees ... against any act or omission of the public authorities or individuals which currently or imminently may damage, limit, modify or threaten rights and guarantees recognized by this Constitution" including, expressly "rights protecting the environment." This summary procedure, known as a *tutela* action, may be invoked by "the damaged party, the ombudsman and the associations which foster such ends registered according to a law determining their requirements and organization forms."

The Argentine Supreme Court has interpreted the provision broadly, invoking the diffuse

action described by the lower court in the dolphin case. In a 2010 case, the Supreme Court of Argentina invalidated a permit that would have allowed mining in a UNESCO Natural Heritage Site on the basis of a diffuse *tutela* action brought under Section 43 of the Argentine Constitution. The Court explained the rationale for giving effect to the provision in these terms:

The environmental *tutela* reinforces the duties that each citizen has for the care of the rivers, the diversity of the flora and fauna, the nearby soil, the atmosphere. These duties are the correlation that the same citizens have to enjoy a healthy environment, for themselves and for future generations, because the harm that an individual can cause to the collective good is a harm to himself. The improvement or degradation of the environment benefits or harms the whole population, because it is a good that belongs to the social and transindividual sphere, and it is from here that the judges derive the particular energy to give effect to these constitutional commands.

The Colombian Constitution as amended in 1991 also provides for the *tutela* action, which dramatically enhances access to justice by providing for broad jurisdiction over cases by individuals, with or without lawyers, to enforce fundamental rights. This has become widely used in Colombian courts to vindicate environmental rights, whether under environmental provisions or other provisions relating to the environment, such as the right life, to dignity, or to health: most of the Colombian cases discussed in this handbook are *tutela* actions, such as those brought by the recyclers for violation of their environmental and livelihood rights, cases brought by residents of an apartment bloc that was not connected to the city's water system for violation of the right to water, the cases brought by people who lived near an open sewer, and so on. However, where plaintiffs assert collective environmental interests that are grounded not on the health of the claimant but on the harm to the environment, courts have accepted the cases under a separate constitutional writ, the *acción popular*, which permits courts to vindicate diffuse interests. The Mexican constitution was also recently changed to permit diffuse rights including in environmental cases.

Where amparo or tutela actions exist, it is not such a large step to extend the right to suit to persons who seek to vindicate the diffuse rights of a community or of the whole society. In Peru, the constitution does not explicitly mention the right to bring collective environmental actions but the Constitutional Procedure Code does. Likewise, in Ecuador, the amparo law permits collective actions to protect the environment (including that of indigenous communities), though here environmental rights are amplified by the protection of the rights of nature, which by definition are enforceable by people who are generally affected and who claim the rights not on behalf of themselves but of nature itself.

In other Latin American countries, courts have read the combination of substantive protection for the environment and a commitment to ecological values on the one hand and broad standing provisions on the other to permit diffuse actions. The Costa Rican Constitutional Chamber, for instance, has held that "even though a direct and clear suit for the claimant does not exist ... all inhabitants suffer a prejudice in the same proportion as if it were a direct harm," such that a claimant may seek to protect the right "to maintain the natural equilibrium of the ecosystem."

Elsewhere in the world, standing is opening up as well. In the Philippines, the Supreme Court has developed a set of "Rules Of Procedure For Environmental Cases" that encourage the

vindication of constitutional and other environmental rights in extraordinary ways. Among its provisions are the authorization for citizen suits that can be brought by "Any Filipino citizen in representation of others, including minors or generations yet unborn," (at Rule 2, s. 5); the authorization for the issuance of a Temporary Environmental Protection Order (Rule 2, s. 8); the requirement that courts "prioritize the adjudication of environmental cases" and decide them within one year from the filing of the complaint (Rule 4, s. 5); and protections against Strategic Lawsuits Against Public Participation, which are designed to thwart vindication of environmental rights (Rule 6).

Importantly for environmental rights, the Philippine Rules provide for consideration of cases brought on behalf of nature, known as the "writ of Kalikasan." Such a writ can be pursued on behalf "of persons whose constitutional right to a balanced and healthful ecology is violated, or threatened" by a public official or private entity, "involving environmental damage of such magnitude as to prejudice the life, health or property of inhabitants in two or more cities or provinces." (Rule 7, s. 1). The writ petition is filed without docket fees, and within 3 days of filing in the Supreme Court or Court of Appeals, the court must decide whether to issue the relief sought, which consists of either an ocular inspection of the relevant place or the production or inspection of documents or things. The writ has already been used in several high-profile cases involving issues ranging from the development of genetically modified foods to metallic ore mining.

In Asia, the judicial creativity and commitment to environmental protection and sustainable development has made up for the omissions in the constitutional texts. The principle of broad and diffuse standing was pioneered by the Indian Supreme Court in the 1970s in the form of Public Interest Litigation (PIL), but has since spread to neighboring countries as well as some African nations.

PIL was a deliberate effort by the Indian court to expand the bounds of standing beyond the familiar private right of action that would normally be recognized in a common law court to vindicate a private interest. PIL has proven to be extremely important in a wide variety of socio-economic cases, but it is a particularly useful construct for the vindication of environmental rights because it recognizes not only that environmental harms affect society generally, but that they tend to exert particular pressure on the most vulnerable segments of society. These claims are often based on the environment as it provides access to water, arable land, shelter for the world's poorest people, and to the essentials to sustain a certain quality of life, including individual dignity, a cohesive community, and life itself. They are brought on behalf of the world's poorest people because people with means can often purchase immunity from environmental degradation: they can live in neighborhoods that are not used as landfills, they have sufficient access to medical care to be buffered from the worst health effects of industrial air pollution, they can access food and water from sophisticated infrastructures in global markets, and they do not depend on the nearby rivers remaining clean for their sustenance.

Proving that the complained-of injury resulted from the action of the defendant can be both costly and time-consuming. Most legal services agencies throughout the world are experienced in asserting immediate and direct claims on behalf of their clients (e.g., accessing medical care or social benefits), but environmental litigation entails different and often more complex and more elaborate types of litigation. In one case, the Bangladeshi Supreme Court thanked the Bangladeshi Environmental Lawyers Association (BELA), an

environmental NGO, not only for elucidating the issues, but for bringing the case in the first place and particularly for bringing a constitutional claim challenging the government's failure to act.

As the Sri Lankan court has said: "Such action would be for the betterment of the general public and the very reason for the institution of such action may be in the interest of the general public." PIL has a strong normative ethos of social justice. It promotes a transformative agenda by encouraging marginalized members of the political community to assert rights embodied even in the constitution's aspirational promises.

Many courts have expanded standing in environmental suits upon recognizing the monumental challenge of environmental protection. The Indian Supreme Court has put it this way: "Experience of the recent [past] has brought to us the realization of the deadly effects of development on ecosystem. The entire world is facing a serious problem of environmental degradation due to indiscriminate development. Industrialization, burning of fossil fuels and massive deforestation are leading to degradation of environment." The Colombian Constitutional Court has expressed concern about the environment even more starkly: "[T]he degradation of the environment and its progressive destruction have the capacity to alter the conditions that have permitted the development of man and to condemn us to the loss of the quality of life, for ourselves and our descendents and eventually the disappearance of the human species."

In India and its neighbors, courts have had to infer broad standing from legal and cultural norms; in Latin America, constitutional and statutory provisions have encouraged courts to expand standing for environmental cases even to those who cannot show a direct and individual injury. But in both of these regions, as well as in some other countries around the world, the commitment to opening the courthouse doors to environmental claimants is by now well established. The notion that the protection of the environment is a collective good justifies the broad standing rules that permit *any* citizen to sue for a harm done to the whole society.

Broad standing is also invariably tied to the commitment to rule of law, in that it encourages holding public officials accountable for compliance with constitutional rules and norms. Indeed, it can have a transformative impact because it encourages citizens to engage in public policymaking ensuring that each person has a stake in major decisions made by the government that affect the population.

Standing beyond the living

Taking public interest and diffuse standing doctrines one step further, a few courts have allowed suits on behalf of people not yet living and on behalf of nature itself. If the purpose of these doctrines is to protect the interests of those who (or that) cannot protect themselves, then extending standing in this way is not illogical. In *Comunidad de Chañaral v. Codeco Division el Saldor*, the Chilean Supreme Court held that a farmer had standing to enjoin drainage of Lake Chungarà, recognizing that with environmental damage "future generation[s] would [challenge] the lack of [foresight] of their predecessors if the environment would be polluted and nature destroyed" And in *Oposa v. Factoran*, the Philippine Supreme Court recognized intergenerational standing—that is, the right of an individual to sue on behalf of future generations—although it did so on the basis of pre-existing norms as much

as constitutional right. The Court explained that "even before the ratification of the 1987 Constitution, specific statutes already paid special attention to the 'environmental right" of the present and future generations, citing two policies that articulate a goal of "fulfil[ling] the social, economic and other requirements of present and future generations of Filipinos." "As its goal," the court said, "it speaks of the 'responsibilities of each generation as trustee and guardian of the environment for succeeding generations.""

Although its actual effectiveness may be debated, intergenerational standing is useful in cases where the environmental damage is long-term and grows over time such that future generations are more threatened by irreversible and irremediable damage than the present one, even for actions taken presently.

Indeed, in certain cases, the problem of intergenerational standing is less challenging than the problem of international standing. While some environmental violations are felt locally, the consequences of others do not stop at national boundaries, which do limit the jurisdictions of constitutions and constitutional courts. This is particularly salient with challenges based on climate change, whose effects are felt not only across time but across space as well, and it is particularly true where, as noted above, the harm is felt primarily not only to individuals, but also to other species of flora and fauna and essentially to the environment itself. International standing may be available in courts that accept universal jurisdiction, but no court has yet done so in an environmental or climate change case.

And the spreading concept of the "rights of nature" (discussed elsewhere in this Handbook) is essentially, at least initially, a question of standing: courts and constitutions that have recognized the rights of rivers, glaciers, and other bodies of water and ecosystems have done so by granting them the capacity to appear in court to assert their rights.

The problem of standing also relates to the definition of a cognizable injury: lowering the threshold for standing almost invariably recognizes broader types of harms. Where a plaintiff's property or health is impaired by reason of the defendant's environmental degradation, standing is clear in large part because the injury is easily recognizable to a common law or civil court. But a court may be less likely to find standing where the claimed injury is that the rivers and forests are no longer as pristine as they once were, or that oncepotable water has become contaminated, or that thousands of acres of previously arable land have become desert. These diffuse claims not only open the courthouse doors to more numerous and more different classes of plaintiffs, but require judicial recognition of more diverse types of injuries.

C. Who is Responsible?: Identifying the Appropriate Defendant

In constitutional environmental cases, standing is the most significant hurdle for litigants to surmount as they attempt to invoke a court's jurisdiction, though defendants will often try to dismiss claims on other grounds as well to prevent a court from ever reaching the merits. One common strategy is to assert that the defendant cannot be held liable for the injuries complained of.

In the simplest constitutional cases, defendants are state actors—members of the executive branch or, less frequently, the legislature or even a court—all of whom are normally obligated

to comply with constitutional mandates. In most situations, it does not matter whether the government was acting as sovereign, as regulator, as licensor, as a participant in the market, or in any other capacity since its constitutional obligations are the same. In federal systems, the local (state or provincial) government may be liable instead of or in addition to the central authorities: In the Pakistani case, *Ashgar Leghari*, some 20 representatives of federal and provincial government were before the Court and subject to its order. In that case, as well as others especially within the Asia-Pacific region, courts have created commissions to ensure compliance with the constitutional mandate. This is particularly common in situations involving water because of the joint responsibility that different levels of government often have for joint management of water resources.

Under the theory of horizontal application that operates in some constitutional systems, private parties may also be held accountable for violation of constitutional norms. In Colombia, the constitutional court found that a private landowner whose commercial pig farm created an environmental nuisance that injured her neighbor was obligated to conform to the constitutional requirements for environmental protection. The court explained that because each person has a right to not be bothered by environmental intrusions into her home, it cannot be said that the exercise of a commercial activity can be exercised to the detriment of his or her neighbor's rights, given the inactivity of the officials charged with controlling such situations. In that case, the suit was brought against the municipality and the remedy ran against the government officials who were ordered to cease the offending commercial activity but the burden was directly felt by the private entrepreneur whose actions caused the environmental violation.

Horizontal application of constitutional obligations is useful in environmental litigation because a court may be more likely to find liability against a private party than against the government, both because separation of powers principles tend to protect government actors, and because in most cases the private party's action (e.g. the cutting down of the forests or the mining) is more likely to be the direct cause of the environmental degradation than is the government's decision to authorize the private party's action or its failure to protect against it. Aside from liability, a court may be more likely to award damages against a private defendant than against a government defendant, as the latter is likely to be protected against damage awards by sovereign immunity and, in any event, may be less likely to comply with a court order.

D. Timing: When is the Right Time to File a Claim?

Typically, a constitutional violation occurs *after* a defendant's actions have caused a cognizable harm to a defined cohort of individuals who are the intended beneficiaries of the constitutional right. But the precise timing of an environmental injury often makes it difficult to determine when a claim may be brought. This is perhaps a question of the definition of the right: Is the constitutional right to a healthy environment violated any time a governmental policy throws out of balance the "rhythm and harmony" of nature? Or is the triggering action when there is a showing of harm to the environment—that is, when the river is polluted or the forest is cut? Or perhaps before the harm occurs, when the government issues the permit or allows the development project? Or perhaps after the injury has become evident and can be quantified? Or all of the above? Most courts would require at least some action on the part of the defendant to have taken place, and many

courts will require more.

These questions may be closely linked to standing. Standing normally requires that the plaintiff prove that the injury is actual or imminently threatened; courts will typically not recognize a cause of action if the harm is speculative or conjectural because there is no basis for holding a defendant liable for harm that she or he has not yet caused. At that point, there is nothing for the defendant to be responsible for and predicting the harm is far too speculative: will the plaintiff actually become ill, how severely, how much treatment will cost, how long will it last, and so on? Even where diffuse standing is accepted, it can be challenging for plaintiffs' groups to prove in *advance* even by a preponderance of the evidence how widespread an adverse health effect will be or how devastating to the community it will be when it strikes. Thus, a court may be less likely to accept a suit where the plaintiff's physical condition is not at present compromised. Similar problems arise where the plaintiff's claim of *future harm* is based on the right to life, dignity, property, or some other human right.

In cases claiming harm to the environment—as opposed to claims of harm to individuals or communities—courts have recognized the need to act before the damage occurs and many have shown particular solicitude to claims of threatened environmental damage. In the Argentine case that sought to protect against threats to a UNESCO world heritage site, the court reiterated (from a previous case) the conviction that "the harms caused to the environment are the grand theme of the twenty-first century, and it is a duty of all to join together so that these harms are prevented, since, once produced, they are as a practical matter, impossible to repair." As a result, the court continued, no one can have a right to compromise public health and bring death and harms to neighboring residents by the use of their property or, specifically, by the practice of a profession or industry. In a Turkish administrative case, the court cancelled a license for gold processing before it even went into effect, upon finding that it "would operate at a risk which, if materialised, would certainly directly or indirectly impair human life due to the resulting damage to the environment." Implicitly or explicitly, many courts entertaining constitutional environmental claims have adopted the precautionary principle, which permits the vindication of rights before harm has been done on the assumption that if it were to occur, the harm might be devastating to humans or nature and would likely be irreversible.

At the other end of the timeline, environmental claims may sometimes be brought too late. This could occur where the harm caused by the environmental violation is not known, such as where, for instance, dumping or mining contributes to increased cancer rates in a community. In these cases, courts may be leery of accepting such claims if the evidence of the violation has disappeared or dissipated, if corporate control over the defendant has changed making assessment of liability difficult, or if the applicable statute of limitations has run.

E. Justiciability and Process

Many constitutional and other apex courts have also varied some other procedural requirements for the purpose of facilitating the vindication of environmental rights. Most of these variations apply in environmental rights cases generally, regardless of whether the source of the right asserted lies in the constitution or elsewhere.

For example, the Philippine Rules of Procedure in Environmental Cases explicitly adopts the precautionary principle as a matter of evidence, explaining that: "When there is a lack of full scientific certainty in establishing a causal link between human activity and environmental effect, the court shall apply the precautionary principle in resolving the case before it. The constitutional right of the people to a balanced and healthful ecology shall be given the benefit of the doubt. "The rules also broadly define the types of evidence that may be admissible in environmental cases: "Photographs, videos and similar evidence of events, acts, transactions of wildlife, wildlife by-products or derivatives, forest products or mineral resources subject of a case shall be admissible when authenticated by the person who took the same, by some other person present when said evidence was taken, or by any other person competent to testify on the accuracy thereof." As a result, the absence of proof of particular harm does not typically preclude a cause of action or the finding of a violation, given the consequences of failing to protect the environment. The Colombian court has been emphatic on this point as well: it has upheld a set of reforms that permit the preemptive confiscation of property that would be used to harm the environment, even in the absence of scientific certainty of the damage, noting that the ill effects, harms, risks, and dangers that the environment faces guide the interpretation of constitutional environmental rights. In that case, upholding the regulations ensured that the respective authorities had the necessary means to protect the environment. In south Asia, the principle has also been broadly recognized: in one case from Sri Lanka, the court ordered an environmental impact statement for a mining enterprise, noting that "if ever pollution is discerned, uncertainty as to whether the assimilative capacity has been reached should not prevent measures being insisted upon to reduce such pollution from reaching the environment."

This concern for the environment sometimes leads to the suspension of other procedural rules. The Argentine court, for instance, put to one side "the ancient concepts of the burden of proof," ordering the mining companies seeking a permit to prove that their activities would not cause environmental damage. The court also noted that because environmental harms often elude certitude that it would accept probabilistic evidence of harm to allow the case to proceed. Indeed, it has been noted that throughout Argentina, "a theory developed in the last decades [that] has changed the traditional rule that plaintiff bears the main burden of proof. According to it, the party required to prove or disprove a given fact is the one which is in a better situation to do so. On these grounds, important companies who are defendants are often placed in the need to prove their defenses, while individual plaintiffs may offer little or no evidence (and are not subject to perjury sanctions when they lie)," according to a report on Argentine diffuse and collective rights.

Such probabilistic elasticity seems to apply in a broad array of situations but when invoked in environmental cases, it can be particularly helpful in two ways. Leaving the burden of production with the plaintiff deters litigation, increases the cost on plaintiffs of maintaining litigation, and makes success less likely simply because of the difficulty of amassing sufficient evidence to prove the existence of or potential for harm to humans or nature. Shifting the burden may in some cases dramatically reduce these obstacles. In addition, shifting the burden of persuasion to the defendant also makes it substantially easier for the plaintiff because the defendant's obligation to persuade a court that no harm will ensue from its activities may be much more onerous than showing the potential for some harm. This can be seen, for instance, in the Ecuadorian case vindicating the rights of nature, where the court imposed on the defendant the obligation to prove that road construction

did not harm the environment, an obligation that the government could not satisfy.

In other cases, courts have removed even more specific barriers that could impede the vindication of environmental rights. The Ugandan High Court has inferred from the Constitution's broad standing the dilution of certain procedural requirements in order to permit a suit to proceed. The court inferred that the ordinary rule that defendants have 45 days in which to respond to a constitutional complaint "cannot apply to a matter where the rights and freedoms of the people are being or are about to be infringed." The right at issue in that case was the environmental right "to a clean and healthy environment" that would be violated if the government allowed chimpanzees to be exported to China. Despite these concessions, though, the costs of litigation can still be a significant deterrent for many putative plaintiffs.

F. Affirmative Defenses

Jurisdictional limitations, as between federal and subnational courts, like rules governing venue may frustrate efforts to pursue claims. Even if jurisdiction is accepted, most constitutional defenses and limitations apply similarly in substantive environmental rights litigation. State and non-State defendants may assert the usual factual defenses (e.g. that they did not do the complained-of action, or that their actions or omissions did not cause the complained-of injury) and legal defenses (e.g., that their actions or omissions did not violate any legal duty imposed by the constitution). Legal objections may be particularly pertinent where the fundamental environmental right falls under a directive principle of state policy and is therefore formally judicially unenforceable. As we have seen, however, even in these situations, some courts have overcome this objection by finding that the unenforceable environmental right appertains derivatively to another enforceable right, such as the right to life or to health.

In most constitutional systems, environmental rights are not absolute and may be limited or overcome in at least three situations, all of which pertain equally to the enforcement of other constitutional rights. First, the right may be limited if it conflicts with another right, such as the right to life or a non-derogable right like the right to dignity. As we have seen, however, in some cases, the court's concern for the environment overrides even seemingly compelling human interests, as happened, for instance when a Colombian court held that the health of a disabled man, which improved through animal therapy with a parrot, had to yield to the environmental interest in protecting wild birds. In an Israeli case involving the provision of water to residents of illegal desert settlement, the court tried to "find the balance between the demand for keeping the law and its appropriate enforcement and the concern for a person's basic and existential need for water, even if he does not abide by the law." The positive law that controls judicial discretion rarely identifies how competing interests should be balanced.

Second, the environmental right, like other rights, is almost always subject to a limitations clause or a proportionality test. The South African Constitution, for instance, states that: "The rights in the Bill of Rights may be limited only in terms of law of general application to the extent that the limitation is reasonable and justifiable in an open and democratic society based on human dignity, equality and freedom, taking into account all relevant factors..." Thus, Parliament could restrict environmental rights if necessary to protect

human dignity or equality such as, for instance, where the government develops electrical or water infrastructure that benefits the ability of people to live in dignity though at the same time impairing the natural environment. This could happen, too, where the right to work is pitted against environmental interests. Likewise, even where a constitution is not explicit on the topic, most constitutional rights are subject to a proportionality test, so that an environmental right may be limited in proportion to a particularly strong need. The requirement of proportionality is especially relevant in environmental litigation where balancing is almost intrinsic: a timber permit that harms the environment may nonetheless be permitted if its scope is appropriate to the need. In South Africa, for example, the court has limited vindication of some socio-economic rights where the infringement is "reasonable" in light of all the relevant factors.

Third, courts may decline to vindicate environmental interests if they are deemed to be not an individual right, but an obligation on the State. Thus, a court may order the government to develop a plan for environmental protection, but will not find that a government or private actor has violated a particular plaintiff's right to a healthy environment. Sometimes, this precludes the cause of action; other times, as will be discussed in the next chapter, it dictates the form of remedy.

In each of these situations, environmental rights are limited by other considerations. A counterexample is found in a rule of decision used in some courts of "in dubio pro natura," which means that when in doubt or when equities are balanced evenly, a court must defer to the decision that upholds environmental rights).

Plaintiffs seeking to enforce constitutional rights face a number of hurdles just getting and staying in court. Defendants have many opportunities to petition courts to dismiss cases for reasons having to do with the identity of the parties, the timing, or simply because the plaintiffs lack adequate proof of the injury they seek to remedy. While adhering to the general principles that govern litigation throughout the world, many courts have nonetheless found ways to encourage plaintiffs to bring constitutional environmental claims by shifting, bending, or outright ignoring certain rules out of an appreciation for the important values at stake in such litigation - the potential cost to humans and to the environment itself of doing nothing and the likely irreversibility of environmental damage. In many cases, the authority for doing so comes not from the constitution itself but from common law principles relating to environmental law. Even so, once plaintiffs have effectively invoked judicial authority, the challenges to obtaining a remedy and having it enforced are enormous.



ADJUDICATING ENVIRONMENTAL CONSTITUTIONALISM

[I]t has fallen frequently to the judiciary to protect environmental interests, due to sketchy input from the legislature, and laxity on the part of the administration.

Chief Judge B.N. Kirpal, Supreme Court of India

Environmental constitutional jurisprudence is gaining salience around the globe. In southeast Asia and throughout Latin America, for instance, courts are increasingly vindicating rights in a wide variety of settings, from mining to water and air pollution. And new rights are continually being recognized.

This Chapter examines judicial engagement of constitutionally embedded environmental rights provisions. It first examines the myriad challenges presented by adjudicating claims rooted in environmental constitutionalism, including textual interpretation, costs, balancing, and judicial boundaries. It then bores into just how constitutional and other apex courts have received such claims. We conclude that while some courts have avoided engaging environmental constitutionalism that there is noticeable and steady progress toward recognition of environmental rights as independent, dependent, derivative, or dormant rights in courts throughout the world. Moreover, even where courts have not accepted that a constitutional environmental right has been contravened, the mere fact that such arguments are being made and considered augments the attention that constitutional environmental rights receive in public discourse. And this, in itself, can meaningfully contribute to the success of environmental claims in the future. The result is that, collectively, courts will continue to play a necessary role in the vindication of environmental constitutionalism worldwide.

A. Challenges in Adjudicating Environmental Rights

Claims seeking to vindicate individual rights to a quality environment engender unavoidable challenges. First, courts need to develop or interpret new concepts and vocabulary, determining the scope of "environment" and the measurement of "healthy" or "quality," for instance. Second, the usual hurdles of litigation are often exacerbated in constitutional environmental cases, including those relating to costs, the need for technical expertise, the quantum of evidence needed, and so on. Third, vindicating environmental rights typically presents fundamental questions of policy choices in that they often pit the human rights claims against each other, such as when an industry closure improves water quality at the expense of jobs, or when the cost of expensive equipment to alleviate air pollution is borne by consumers or employees.

1. Interpreting Constitutional Text

Constitutional provisions are often enacted with little if any guidance on threshold questions. They typically have little or no drafting history, and they tend to leave much unsaid in the text itself. With some exceptions, there is little evidence of the intent of the drafters of these provisions that would provide guidance to their interpreters. At bottom,

environmental constitutionalism requires judges to deconstruct nouns, verbs, predicates, subjects and objects. Each of these choices can have wide-ranging consequences that can affect the health and dignity of individuals, the lives of communities, the health of ecosystems, and potentially national economies and political outcomes.

Noun: Environment. There is inherent lack of certainty about what the 'environment' entails and how a meaningful conception of the environment can be incorporated into the structure of constitutional adjudication. The Chilean Supreme Court has recognized the potential reach of the term: "[T]he environment ... is everything which naturally surrounds us and that permits the development of life, and it refers to the atmosphere as it does to the land and its waters, to the flora and fauna, all of which comprise nature, with its ecological systems of balance between organisms and the environment in which they live."

Other courts have also construed 'environment' broadly, invoking it in disparate circumstances. It can refer to physical landscape, fauna, spaces of religious or cultural significance, and the built environment. In *Minors Oposa v. Factoran*, the Philippine Supreme Court recognized the difficulty of giving meaningful boundaries to the constitutional mandate of "a balanced and healthful ecology."

The list of particular claims which can be subsumed under this rubric appears to be entirely open ended: prevention and control of emission of toxic fumes and smoke from factories and motor vehicles; of discharge of oil, chemical effluents, garbage and raw sewage into rivers, inland and coastal waters by vessels, oil rigs, factories, mines and whole communities; of dumping of organic and inorganic wastes on open land, streets and thoroughfares; failure to rehabilitate land after strip-mining or openpit mining; kaingin or slash-and-burn farming; destruction of fisheries, coral reefs and other living sea resources through the use of dynamite or cyanide and other chemicals; contamination of ground water resources; loss of certain species of fauna and flora; and so on.

Harm to the environment is likewise broad. A degraded environment may affect people's lives, dignity, health, housing, access to food and water, and livelihood and it may affect the ecosystem itself. Few courts have distinguished between environmental and human harms. This doctrinal fluidity may be due in part to the underdevelopment of the law, or it may be due to the interlinked nature of the harms themselves. Access to drinking water is a human right unrelated to environmental dimensions as long as there is sufficient supply; it devolves into an environmental right when it becomes scarce (perhaps due to desertification) or polluted (perhaps in violation of environmental laws).

With this broad conception of the environment in mind, it is easy to see why admitting, or rather denying, particular claims is challenging. With some exceptions—including subnational constitutions in Brazil, for example—constitutions seldom if ever delimit the scope of environmental protection or the types of actions that may be pursued in courts. Hence, courts are typically left to define for themselves the boundaries of their own authority, an exercise that tends to hinder judicial activation of environmental constitutionalism.

Adjective: Healthy, Balanced or Quality Environment. The objective adjective that qualifies 'environment' can contribute to doctrinal challenges. What satisfies the constitutional requirement of a 'quality,' 'safe,' 'healthy,' 'productive,' or 'balanced' environment? How does a

court decide when that standard has been achieved? Constitutional provisions that contain compound adjectives add to the confusion. The Philippine Constitution, for example, requires the State to "protect and advance the right of the people to a balanced and healthful ecology." Does healthful entail balanced or does it impose an independent requirement? The challenges mount when one considers that human activity has already inexorably altered virtually all aspects of the 'environment.' In the industrialized or industrializing world, how 'clean' must environment be to meet the constitutional standard? And should a court determine what to weigh to determine if an environment is 'balanced'?

Beyond the problem of measurement is the question of attribution. If 'healthy' modifies the environment, then the right would extend to cases involving environmental degradation per se, regardless of its effect on humans. This would include cases requiring the clean-up of beaches of Chañaral, Chile, for instance, where copper tailing wastes had been deposited for 50 years, destroying marine life there. In *Pedro Flores*, the Chilean Supreme Court observed:

[T]he daily accumulation of thousands of tons of contaminants by whose fast and silent chemical action the ecology, along the coast, is destroyed, producing the ecological destruction of all forms of marine life in hundreds of square kilometers . . . a devastation that blossoms over the whole coastal area of the National Park Pan de Azúcar, with which dies a piece of Chile."

Where this is the standard, the case would center on whether the environment itself is healthy, not on whether the environmental degradation induced any harm to human beings.

But in most cases, the courts consider a 'healthy environment' as relating to the health of the local population, not of the environment. Sometimes the anthropocentric nature of the right is justified or even demanded by the constitutional text itself. For instance, the Turkish constitution has the purpose of protecting the environment is to benefit people, not ecology: "Each individual has the right to live in a healthy and balanced environment. . . . The State must provide centralised health institutions and organise related services, so that people's lives are protected, people can continue to live in a physical and mental health, saving human and material energy, increasing efficiency and developing cooperation." Likewise, the Peruvian constitution creates the right "to peace, tranquility, enjoyment of leisure time and to rest, as well as to a balanced and appropriate environment for the development of his life." Thus, in a Peruvian case against an American corporation operating a lead smelter, it was sufficient to show evidence that the health of the children in the local community was severely impacted, regardless of any attendant degradation to the environment itself.

More often, courts blend human and ecological impacts because the text itself is ambiguous. The Argentine constitution, for instance, provides: "All inhabitants are entitled to the right to a healthy and balanced environment fit for human development in order that productive activities shall meet present needs without endangering those of future generations; and shall have the duty to preserve it." 'Healthy' may relate to human health but 'balanced' surely qualifies the environment, so in the landmark case requiring the clean-up of the Matanza-Riachuelo River Basin, for example, the evidence and discussion of harm to the water itself and harm to the people who live near it were inextricable.

Object: Right. Rights are not interests that an individual holds, but ways to structure relationships—among people within a legal community and between people and the state.

It is apt, then, to constitutionalize environmental rights to help structure those relationships insofar as the environment is concerned. Environmental rights, as we have seen, structure the relationships between present and future generations, by limiting what the former can do to the latter, as well as the contemporaneous relationship among people. Environmental rights also structure the relationship between neighbors, for instance, as they regulate how a property owner might use his land, or between upstream and downstream users of water. Courts, then, have an important role to play in mediating the relationships that are described and structured by constitutional environmental rights.

So how do courts give content to the concept of environmental rights without allowing them to swallow up every other right? One approach, which borrows from the discourse at the international level, is to limit the reach of environmental rights to already accepted human rights. Environmental constitutionalism has pushed the conventional limits of this approach in two directions. First, national courts are recognizing an ever-increasing number of constitutional human rights claims and many of these have been held to touch on environmental phenomena. The Constitutional Court of South Africa, for instance, has held that the right to housing, which may be more readily amenable to enforcement than environmental rights per se, may be violated by inattention to environmental problems. Even where constitutions do not specifically enumerate particular rights, courts have expanded the scope of interests that constitute violations of familiar human rights by recognizing, for instance, that environmental degradation can constitute a violation of privacy and family life or that esthetic and recreational environmental interests are essential to enjoying a dignified existence. As the Supreme Court of Pakistan has said: "The Constitution guarantees dignity of man and also right to life ... and if both are read together, question will arise whether a person can be said to have dignity of man if his right to life is below bare necessity like without proper food, clothing, shelter, education, health care, clean atmosphere and unpolluted environment." Second, courts have expanded the range of putative beneficiaries by including not only property owners but also non-traditional rights holders, including neighbors, communities, and future generations. As this body of law expands, there are very few interests of any consequence that remain outside the framework of constitutional human rights. Still, the environmental interest would have to be seen as an incident of an already recognized human right.

A slightly less anthropocentric option is explicitly to recognize environmental rights as a human right, so that environmental harms do not have to fit neatly into the other human rights boxes. This view reflects an international environmental law approach and has been incorporated into constitutions throughout the world. This also ensures that environmental values are given at least as much weight as other constitutional values. This would reflect at the national constitutional level trends in unifying environmental and human rights that are advancing at the international level.

An even less anthropocentric approach involves a class of rights somewhere between human rights and rights of nature that permit humans to commence constitutional environmental claims to protect nature or wildlife. A final approach would entirely reject anthropocentrism and recognize instead the rights of nature, as Ecuador and Bolivia have recently done and as may be spreading to other regions of the world. To vindicate these rights, it is not necessary to refer at all to human interests or rights; rather, the harm to be vindicated is the violation to nature itself. If vindicating environmental rights does not require harm to humans, it is hard to square with the concept of a constitutional right. A plaintiff would be complaining about a bad state of affairs, like suing over the global financial crisis or the prevalence of cancer. If it does require harm to humans, then it starts to look more like a constitutional (or indeed any kind of common law) claim, but the difficulty of proof increases with each additional required showing. While it may not require significant litigation resources to prove that dumping toxic waste has occurred, it may be very difficult to prove that such dumping has increased or will increase the incidence of cancer in the local community, or that it caused a particular plaintiff's illness. The problem is magnified when litigation seeks to vindicate the rights of future generations; how can future generations be "made whole" to use the common legal remedial standard? Constitutional texts typically shed little light on these questions respecting beneficiaries.

These difficult questions of public policy may, in some instances, even require recalibrating the boundaries between the public and private spheres. While some governments are held responsible for the environmental degradation caused by their licensees, some corporations are required to take on public goods like environmental clean-up. Environmental litigation may often in fact invert the normal expectations relating to the roles of public and private parties. Whereas traditional constitutional rights litigation pits the private individual against the public authority, environmental litigation often pits members of the public against a private entity (thus invoking the principle of the horizontal application of constitutional rights and obligations). Moreover, in many of these cases, private individuals are asserting public rights, whereas the government is facilitating private gain. As a result, environmental litigation is increasingly forcing courts to adjust long-held views about the proper allocation of public and private power.

2. Identifying Breaches

Typically, a constitutional violation exists where a government actor has impaired a person's ability to exercise the full scope of her rights—where, for instance, a person is unable to speak freely or where she is treated unequally to those who are similarly situated. But identifying the nature of the violation in environmental rights is a quixotic task. First, some environmental degradation is inevitable, so the baseline is not maximal enjoyment of the right but something less than that. No defendant can be held liable for air that is not pure or for the use of some nonrenewable resources the way it can be held liable for even a small infringement of a traditional constitutional right. Indeed, most environmental law (including the principles underlying the public trust doctrine and sustainable development) is premised on the principle that some nature is to be consumed by humans—just not too much or too selfishly. As a result, constitutional environmental claims, unlike other human rights, are necessarily limited by other important interests: whereas courts typically are not concerned about overprotecting speech or demanding too much equality, excessive environmental protection is often seen as derogating from economic development, the rights of property owners, or other significant social values.

Another challenge in implementing environmental constitutionalism is to identify the actual harm that has been done. Establishing causation can be problematic. Sometimes, this problem can be operationalized as a choice between human rights and environmental rights, although in the concrete context of litigation, even these classifications do not answer all questions. In all too many cases, divining the line between a problem and a

cognizable injury—identifying when the proper use of river water becomes an abuse, or when the release of toxins becomes injurious to public health—requires courts to balance equities with little if any prescriptive guidance. This problem is magnified with the growing number of claims relating to climate change, of which there is abundant evidence, but the evidence tying it to specific harms suffered by specific humans within a specific nation is much more tenuous. Usually, something more is needed to turn a misfortune into a claim.

B. Four Types of Judicial Interpretation

Ascertaining the extent of judicial receptivity to environmental constitutionalism is challenging. Domestic constitutional and apex courts are arguably the best indicators of judicial tolerance to constitutionalism in any given country. Their decisions are more likely to engage the definitional, structural and policy concepts so central to constitutionalism. They are intended and expected to speak with authority, often with the last word that binds lower courts and administrative tribunals. And they are most likely available and subject to ready interpretation.

What these decisions reveal is that judicial receptivity to environmental rights cases can be divided into four categories. First, some courts have recognized causes of action to enforce express constitutional rights to a quality environment and of nature. We call these 'independent' environmental rights cases because they do not rely upon other constitutional provisions. The leading independent environmental rights cases come from Central Europe and Latin America where many courts have been enthusiastic enforcers of textually explicit environmental provisions. Second, some courts have recognized a right to a quality environment as an adjunct of constitutional provisions that direct the government to protect the environment as a matter of duty or policy. We call these 'dependent' environmental rights cases because they depend on the existence of environmental policy provisions that are typically not judicially enforceable. The Supreme Court of the Philippines has been a pioneer in deciding dependent environmental rights cases. Third, some courts recognize environmental rights as being implicitly incorporated into other substantive, enforceable constitutional rights, including a right to life, family, or dignity. We call these 'derivative' environmental rights cases, because the cause of action derives from another constitutional right. High courts in India, Pakistan and Nepal have been at the forefront of recognizing dependent environmental rights. Last, constitutional and apex courts in the majority of countries to have adopted environmental rights have yet to engage it other than episodically. We call these 'dormant' environmental rights. With this framework in mind, we turn to the cases.

1. Independent Environmental Rights

Dozens of countries have constitutions that expressly recognize a right to a quality environment. Only a fraction of these provisions, however, have been tested before domestic constitutional or apex courts. The majority of cases involving constitutional environmental rights, including some of the earliest, come from courts in South America and Central Europe.

Courts in South America have also been willing to engage environmental constitutionalism. For example and as noted above, in 1988, the Supreme Court of Chile in *Pedro Flores v.*

Corporación del Cobre, Codelco, Division Salvador upheld a constitutional environmental right "to live in an environment free from contamination," to stop the deposition of copper mill tailings onto Chilean beaches that were adversely affecting protected marine life.

And then in 1997 it issued what may be that country's most significant constitutional environmental rights decision. The Tierra del Fuego region of Chile contains some of the world's last remaining continuous stands of cold-climate virgin forests, known as "dwarf trees," in the world, stands that were spied upon and written about by Magellan and Darwin. The U.S.-based Trillium Corporation, however, saw the trees as cropland for the global paper market, and asked the Chilean government for permission to log 270,000 hectares of it for \$350 million in what was known as the "Rio Condor Project."

Chilean citizens brought a lawsuit, claiming that the Rio Condor Project violated their constitutional "right to live in an environment free from contamination." The Supreme Court of Chile agreed. In what is known as the *Trillium* decision, the Court enjoined the project, holding that the Chilean constitution requires "the maintenance of the original conditions of natural resources," and that governmental agencies are required to keep "human intervention to a minimum." In the *Trillium* decision, the Court also held that the constitutional right to a healthy environment is owed to all citizens, thus allowing the plaintiffs to pursue the matter as *an acción de amparo* even though none of them had personally suffered any injury. Chile subsequently instituted an environmental review procedure to hear constitutional claims.

Enforceability remains a key issue. Many courts have held environmental rights to be enforceable (that is, citizens have standing to enforce them), and self-executing (that is, they don't require additional action by the legislature). First, some courts have broadened standing to encourage claims enforcing environmental rights. For example, in *Proterra v. Ferroaleaciones San Ramon S.A.*, the Supreme Court of Peru granted citizens open standing to enforce constitutionalized environmental rights. Moreover, in keeping with the *Minors Oposa v. Factoran* decision, the Philippine Supreme Court in *Manila Bay* recognized broad standing to enforce environmental constitutional rights, allowing for citizen standing in matters that are of "paramount interest to the public" or of "transcendental significance to the people."

Second, many courts have found environmental rights to be self-executing. In Carlos Roberto Garcia Chacon, the Constitutional Court of Costa Rica upheld a constitutional "right to a healthy and ecologically balanced environment" as being fundamental, self-executing, and enforceable by all citizens, noting that "all citizens possess to live in an environment free from contamination. This is the basis of a just and productive society." In another case, the Constitutional Court in Costa Rica invoked the same provision to stop a transnational banana company from clearcutting approximately 700 hectares near the Tortuguero National Park. The protected area includes nesting habitat for the endangered green macaw.

Courts in Argentina have found enforceable that country's constitutional guarantee that "[a]II inhabitants enjoy the right to a healthful, balanced environment fit for human development, so that productive activities satisfy current needs without compromising those of future generations" In 1993, the Supreme Court of Argentina observed that "[t]he right to live in a healthy and balanced environment is a fundamental attribute of people. Any aggression to the environment ends up becoming a threat to life itself and to

the psychological and physical integrity of the person." In *Alberto Sagarduy*, the Supreme Court of Argentina upheld a citizen's rights to enforce constitutional environmental rights without first having to exhaust administrative remedies. And in Sociedad de Fomento Barrio Félix v. Camet y Otros, the court ever invoked the provision in upholding the right to enjoy an ocean view.

Likewise, the Constitutional Court of Ecuador has embraced that country's constitutional guarantee of substantive environmental rights. For example, in *Fundación Natura v. Petro Ecuador*, the court upheld a civil verdict against Petro Ecuador on the basis that the production of leaded fuel violated Ecuador's constitutional guarantee to a "healthy" environment. In *Arco Iris v. Instituto Ecuatoriano de Mineria*, using the same right to a healthy environment, the Court concluded that degradation of Podocarpus National Park "is a threat to the environmental human right of the inhabitants of the provinces of Loja and Zamora Chinchipe to have an area which ensures the natural and continuous provision of water, air humidity, oxygenation and recreation." Nonetheless, the temptation of lucrative opportunities to exploit the country's abundant natural resources presents a persistent challenge to responsible stewardship of its globally significant environment.

Courts in some post-communist countries in Central and Eastern Europe also aimed to implement newly minted constitutional environmental rights provisions. For example, in 1989, Hungary amended its constitution to recognize "the individual's right to a healthy environment." The Constitutional Court of Hungary seems to have been the first in Central and Eastern Europe to give force to this type of provision. In *Case 28/1994*, the Court held that the Hungarian legislature's efforts to sell for cultivation previously nationalized forested lands under the former communist regime would be unconstitutional, finding that it violated the constitutional environmental rights residing in the Hungarian Constitution. The Court rejected the state's justification for the repeal, reasoning that "[t]he right to a healthy environment guarantees the physical conditions necessary to enforce the right to human life... extraordinary resolve is called for in establishing legislative guarantees for the right." Thus, it held that once the State created a baseline of environmental protection, it could not thereafter degrade it. The Court also held that violation of environmental rights ran afoul of the constitution's "right to life." Hungary subsequently amended its constitution in a way that diluted environmental rights.

The Constitutional Court of Latvia has been particularly active in enforcing that country's constitutionally-enshrined environmental rights. Section 115 of the Constitution of Latvia provides: "The State shall protect the right of everyone to live in a benevolent environment by ... promoting the preservation and improvement of the environment." The court has struck several local land use decisions as violative of Article 115, especially in the context of activities that might cause or contribute to flooding. For example, in Amolina v. Garkalne Apagasts Council, the court held that a local land use development plan that would have permitted development of flood zones was unconstitutional under Article 115. The court held that by allowing development in flood zones the city council had fallen short of its duty to "promote the preservation and improvement of the environment." It also held that that the land use plan violated the affected individuals' "fundamental right to live in a benevolent environment," which, the court wrote, "shall be directly and immediately applied." Likewise, in Balams v. Ādaži Parish Council, the court struck a land use plan for largely the same reasons. And in Gruba v. Jurmala City Council, the court drew support from the Stockholm Declaration and the Aarhus Convention in striking another land use development plan as violative of an individual's right to live in an environment that does not endanger human

health and well-being. These decisions were dispositive, meaning that the government decisionmakers were enjoined from implementing the challenged plans.

Nonetheless, the court has determined that the right to a "benevolent" environment is not absolute, but involves a balancing of costs and the public good. Evidence matters. Accordingly, in *Baldzēns v. Cabinet of Ministers*, the court rejected a community's challenge to the Ministry of Environmental Protection and Regional Development's issuance of a permit to operate a hazardous waste incinerator for failure to submit sufficient evidence that environmental harms outweighed ensuing public benefit.

Section 115's right to a benevolent environment can also be outweighed by other constitutional guarantees. For example, *Zandbergs v. Kuldīga District* involved a challenge to a water district's plan to condemn a large parcel of property for use as an impoundment to supply water for a hydroelectric station. The affected landowner argued that the plan violated the constitutionally-protected use of his private property. The water district countered that the project advanced the use of renewable energy resources, and therefore promoted its constitutional duty to promote a "benevolent environment." The court sided with the landowner, however, finding that the adverse effect on the landowner outweighed the environmental benefits of renewable energy production.

Courts elsewhere in Central and Eastern Europe have shown receptivity to environmental constitutionalism. Most notably, in *Eurogold*, the Turkish government agreed to allow the giant French mining conglomerate to use cyanide heap-leaching to mine gold and other metals from an centuries-old olive growing region in Turkey. After government-paid loggers began to remove olive trees, olive farmers brought a suit claiming that the government's license contravened Turkey's new constitutional environmental right "to live in a healthy, balanced environment." Turkey's highest administrative court agreed, stopping the operation in its tracks.

Often inspired by developments elsewhere, courts have upheld independent provisions, including in Portugal, where a court upheld "the right to a healthy and ecologically balanced human environment and the duty to defend it," and in South Korea, where a court interpreted an independent environmental rights provision as actionable, although it declined to find that the government's failure to regulate the use of loudspeakers used in furtherance of political campaigns to have violated the right. Ecuador has seen several cases, including a 2015 Constitutional Court decision, vindicating the constitutional right of nature to exist, to thrive, and to protection of its regenerative and vital cycles. Several other courts, in jurisdictions whose constitutions lack protection for nature, per se, have nonetheless followed suit.

2. Dependent Environmental Rights

Some courts have recognized substantive environmental rights as dependent upon some other constitutional directive that advances good environmental governance, which we call dependent environmental rights. The Supreme Court of the Philippines has led the way in enforcing dependent environmental rights. In the celebrated case of *Minors Oposa v. Factoran*, attorney, writer, and law professor Tony Oposa filed a lawsuit on behalf of his children, his friend's children, and generations to come to "prevent the misappropriation or impairment' of Philippine rainforests and 'arrest the unabated hemorrhage of the

country's vital life-support systems and continued rape of Mother Earth." At one time, the Philippines contained nearly 100 million acres of verdant, ancient forests. By the 1990s, commercial logging had reduced this by about ninety-nine percent. The plaintiffs claimed that the government's continued issuance of "timber licensing agreements" violated the country's recently minted constitutional directive that, inter alia, "[t]he State shall protect and advance the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature."

In reversing the trial court, the Supreme Court upheld Oposa's constitutional claim, and also found that the plaintiffs had standing to represent themselves, their children, and posterity. In a sweeping pronouncement, the Court determined that rights to a quality environment are enforceable notwithstanding whether they are constitutionally expressed because they "exist from the inception of humankind."

As a matter of fact, these basic rights need not even be written in the constitution for they are assumed to exist from the inception of humankind. If they are now explicitly mentioned in the fundamental charter it is because of the well-founded fear of its framers that unless the rights to a balanced and healthful ecology and to health are mandated as State policies by the constitution itself, thereby highlighting their continuing importance and imposing upon the State a solemn obligation to preserve the first and protect and advance the second, the day would not be too far when all else would be lost not only for the present generation, but also for those to come – generations which stand to inherit nothing but parched earth incapable of sustaining life.

More recently, in *Metropolitan Manila Development Authority v. Concerned Residents of Manila Bay,* the same court upheld a request for multifaceted injunctive relief by the same lawyer as in Minors Oposa to prevent massive pollution discharges from choking Manila Bay, and to clean and protect it for the benefit of future generations.

Concerned Residents of Manila is particularly instructive about the potential of environmental constitutionalism. Manila Bay, located in southwest Luzon in the Philippines, is a natural wonder. Its 1800 square kilometers contain some of the most diverse biodiversity in Southeast Asia. If ever an area could be described as "teeming" with marine and terrestrial life, it is Manila Bay. The area has a rich strategic history. It is where the U.S. Navy, led by Commodore George Dewey, fought and landed in the siege of Manila at the outset of the Spanish American War in 1898. Japanese forces occupied the Philippines after prevailing in a fierce battle with U.S. and Filipino forces at the beginning of World War II. By the end of the war in 1945, nearly all of Manila lay in ruins.

Given its natural beauty, tropical climate, and strategic location, Manila Bay supports a high population density. Twenty million people live in metropolitan Manila. Indeed, Manila City is the most densely populated city in the world, with 43,079 people per square kilometer. Manila Bay's 190 kilometers of coastline also boast significant industrial, commercial, and residential development and extensive international portage. Not surprisingly, then, Manila Bay environs also teem with pollution from farms, factories, urban runoff, combined sewer overflow, landfills, watercraft, cars, tankers, and trucks, coupled with poor municipal waste planning, poor plumbing, and unlawful or haphazard waste dumping along the bay's tributaries. Most of it ends up in Manila Bay, exceeding the carrying capacity of the

ecological system to withstand, rebound, and recover.

In 1999, a group of fourteen young Filipinos—sub nom. Concerned Residents of Manila Bay—filed a lawsuit against ten executive departments and agencies for neglecting to protect Manila Bay and to clean and protect the bay for the benefit of future generations. The plaintiffs alleged that they have a constitutional guarantee to a quality environment. In Concerned Residents of Manila Bay, the Philippine Supreme Court upheld the lower court's decisions to grant the citizen's request to enjoin the government from issuing any further permits to pollute Manila Bay.

These cases serve as an important model for other courts to follow, particularly for those construing policy directives that complement substantive rights to a quality environment. What other courts should take away from these cases is that environmental rights provisions provide jurisprudential footing for advancing environmental concerns.

3. Derivative Environmental Rights

Some courts have held that other substantive constitutional rights, including a right to life and dignity, harbor environmental rights. Most notably, apex courts in India, Pakistan, Bangladesh, and Nepal have each read a constitutional "right to life" in tandem with directive principles aimed at promoting environmental policy to embody a substantive environmental right. Among these countries, India has been particularly active.

In 1984, the Supreme Court of India was one of the first to find that a "right to life" embeds a right to a quality environment. In Subhash Kumar v. State of Bihar, the plaintiffs brought an action to stop tanneries from discharging into the Ganges River. While the Court dismissed the action for lack of standing, it observed: the "[r]ight to life is a fundamental right under Article 21 of the Constitution and it includes the right of enjoyment of pollution free water and air for full enjoyment of life." Subsequently in M.C. Mehta v. Union of India, the Court ordered the tanneries to shut down unless effluent was first subjected to pretreatment processes approved by the governing environmental agency, privileging, as we have seen, life, health, and ecology over the more tangible benefits of employment and revenue. Charan Lal Sahu v. Union of India involved a challenge to the Bhopal Gas Disaster Act, the federal government's response to the Bhopal disaster wherein more than 3,000 people died following exposure to Methyl Isocyanate from a storage tank operated by Union Carbide (India). The petitioners – some parties adversely affected by the incident – objected to the federal government's exclusive assumption of claims as parens patriae on behalf of affected parties, a majority of who were poor and illiterate. In upholding the Act, the Supreme Court of India interpreted the right to life guaranteed by Article 21 of the Constitution to include the right to a wholesome environment.

Courts in Pakistan have reached the same conclusion. The Supreme Court of Pakistan has held that environmental rights are embedded within that country's constitutional right to life. In *In re: Human Rights Case (Environmental Pollution in Balochistan)*, the Court took judicial notice of a newspaper report that, "business tycoons are making attempts to purchase coastal area of Balochistan and convert it into dumping ground" for nuclear and highly hazardous waste. Without much discussion of the scope of the constitutional rights involved, the Court ordered the agency charged with implementing environmental laws in the area to monitor land allocations in the affected area and forbid such use. In

West Pakistan Salt Miners v. Industries and Mineral Development, Punjab, Lahore, the Court upheld a claim that the right to life included a right to water free from contamination from mining activities: "[t]he right to have unpolluted water is the right of every person wherever he lives." And in Ms. Shehla Zia et al. v. WAPDA, the court held that a constitutional right to life provides cause of action for electromagnetic hazards associated with the construction of a power plant.

A decision from the Supreme Court of Nepal presents a clear statement of how environmental concerns derive from a constitutionally recognized right to life. In *Godavari Marble*, the Nepalese Supreme Court held "since a clean and healthy environment is an indispensable part of a human life, the right to a clean, healthy environment is undoubtedly embedded within the Right to Life." The Court wrote:

The works carried out by the respondent Godawari Marble Industries have been disbalanced to the environment. The dust and sand produced during the explosions which is being undertaken in the mining process has polluted the atmosphere and water of the area and caused deforestation. Due to the continuing environmental degradation and pollution created by the said industry, Right to Life of the people has been violated. The absence of appropriate environment caused diminution of human life."

And in *Yogi Narahari Nath and others v. Honourable Prime Minister Girija Prasad Koirala and others*, the Court issued an injunction to stop the government from granting a lease to establish a College of Medical Science on the site of an environmentally and archaeologically significant piece of land. The Court found that the lease would infringe the constitutional "right to life," which it held implicitly includes the right to a pollution-free environment: "the environment is an integral part of human life." Moreover, in *Advocate Kedar Bhakta Shrestha v. HMG, Department of Transportation Management*, the court found that the constitutional "right to life" guarantees a right to a quality environment. In a reverse environmental rights action of sorts, petitioners claimed that the government's ban on the use of "tempos," three-wheeled diesel-engine-run vehicles that were a principal source of air pollution in Kathmandu, violated their right to carry on a trade or business. The Court upheld the governmental action, reasoning that personal freedom to carry on business practices yields to environmental rights embodied in the constitution's "right to life": "[e]very individual has an inherent right to live in a healthy environment." These cases suggest a willingness to derive environmental rights from a constitutional right to life in the Nepalese constitution.

In Bangladesh, too, the Supreme Court has held that a right to a quality environment derives from a constitutional guarantee to a "right to life," although in two significant cases, despite sympathetic language, the court dismissed the actions for lack of standing. In *Dr. Mohiuddin Farooque v. Bangladesh*, the petitioner alleged that the implementation of a substantial flood control plan would so disrupt the affected community's life, property, and environmental security as to violate a constitutional "right to life." The Supreme Court of Bangladesh held that the Constitution's guarantee of a "right to life" included environmental rights, reasoning: "Articles 31 and 32 of our Constitution protect[s] right to life as a fundamental right. It encompasses within its ambit, the protection and preservation of the environment, ecological balance free from pollution of air and water, and sanitation, without which life can hardly be enjoyed. An act or omission contrary thereto will be violative of the said right to life." Nonetheless, the court dismissed the action, reasoning that petitioners did not have

standing within the meaning of Constitution. And in *Subash Kumar v. State of Bihar*, it held that pollutant discharges sufficient to make the Bokaro River in the State of Bihar unfit for drinking and irrigation could abridge a constitutional "right to life." The Court held that the "right to life" includes the enjoyment of water and air free of pollution. Nonetheless, the Court dismissed the action, holding that the petitioner was motivated by self-interest and thus did not have standing to file a petition on behalf of the public interest.

A court in Hong Kong accepted that a prima facie case could be made that a deteriorated environment infringed upon constitutionally guaranteed rights to health and life. In *Clean Air Foundation v. Government of HKSAR*, plaintiffs alleged that the provincial government of Hong Kong's failure to adequately protect air quality in Hong Kong amounted to a violation of constitutional rights to health and life. Here, while the government prohibited the sale of diesel fuel, it did not prohibit its use or importation. The plaintiffs alleged that this contributed to soot levels nearly three times higher than that of New York City. The Court of First Instance found "that it is at least *prima facie* arguable that the constitutional right to life may apply." Yet it found the matter to be essentially one of policy consigned to the political process, observing: "[h]ow possibly can this court decide that this decision fails to reach a fair balance between the duty Government has to protect the right to life and the duty it has to protect the social and economic well-being of the Territory? It cannot do so .

Courts in South America have also been willing to construe environmental rights from other constitutional prerogatives. The Constitutional Court of Colombia has read a constitutional "right to life" as encompassing a substantive right to a healthy environment. In Fundepublico v. Mayor of Bugalagrande y otros, the Constitutional Court of Colombia wrote that "[i]t should be recognized that a healthy environment is a sina gua non condition for life itself and that no right could be exercised in a deeply altered environment." In Maria Elena Burgos v. Municipality of Campoalegre (Huila), the Court upheld a lower court's order to destroy pig stalls that caused neighbors to fall ill with respiratory distress and fever, finding they constituted an actionable violation of the country's fundamental environmental right encompassed in a right to life. And in Victor Ramon Castrillon Vega v. Federacio National de Algodoneros, the Court found that emissions of toxic fumes from an open pit contravened a constitutional right to life and ordered a company to remediate the pit and pay medical expenses. In reaching these results, the Court has conceived the right to the environment as "a group of basic conditions surrounding man, which define his life as a member of the community and allow his biological and individual survival[.]" Thus, environmental rights exist, "side by side with fundamental rights such as liberty, equality and necessary conditions for people's life [W]e can state that the right to the environment is a right fundamental to the existence of humanity." Even in Jose Cuesta Novoa v. the Secretary of Public Health of Bogota, which confirmed on procedural ground a lower court's dismissal of an effort to enforce environment rights, the Court still recognized that a right to life embodies environmental protections. Likewise, as previously mentioned, the Supreme Court in Chile upheld the right of a farmer to bring a constitutional right to life claim to enjoin the drainage of Lake Chungarà in Comunidad de Chanaral v. Codeco División el Saldor. These cases demonstrate the potential of vindicating substantive environmental rights derived from other constitutional provisions.

Some courts, including those in Pakistan and Nigeria, have construed a "right to dignity" as incorporating environmental rights. For example, the High Court of Lahore recently held

that government action contravened the constitutional right to dignity. The Supreme Court of Nigeria has also held that human dignity and environmental protection are inextricably intertwined. And a federal district court in the United States recently held that the due process clause of the U.S. Constitution can accommodate a claim for a right to a stable climate. The case -- Our Children's Trust v. U.S. and others, -- is on appeal.

Yet for the most part, courts elsewhere have declined to infer that other rights, such as a right to life, include a substantive right to a quality environment. For example, in the United States, while the Supreme Court has never addressed the issue directly and is not likely to do so any time soon, courts for the most part have rejected the position that constitutional rights to "liberty" or "life" provide an implied or penumbral right to a clean environment.

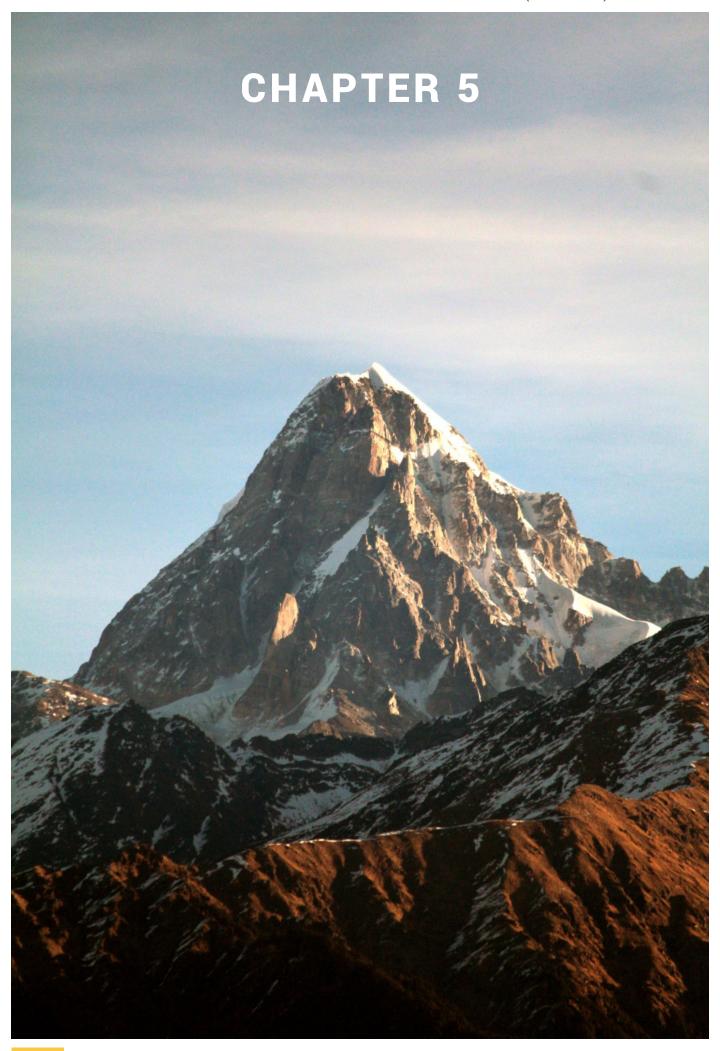
The Federal Supreme Court of Switzerland, for example, declined to read a constitutional passage that the "federal legislature enacts laws concerning the protection of man and his natural environment against detrimental or burdensome influences" as one that confers a fundamental environmental right. Apex courts in other countries, including The Netherlands ("It shall be the concern of the authorities to keep the country habitable and to protect and improve the environment"), and Greece ("The protection of the natural and cultural environment constitutes a duty of the State"), have declined to infer environmental rights into constitutional provisions requiring sound environmental policy.

4. Dormant Environmental Rights

Sometimes, environmental provisions lay dormant. This reluctance to engage environmental rights provisions is a function of the challenges courts face, including interpretation, equities, and the difficulties of balancing environmental interests against equally important social, political, and economic interests, countries where environmental constitutionalism is dormant may benefit from comparative considerations. Thus, many of the constitutional provisions purporting to advance substantive environmental constitutionalism have yet to be engaged meaningfully by domestic courts.

The Constitutional Court of Turkey, for example, has interpreted the constitutional provision that "[e]veryone has the right to live in a healthy, balanced environment," as permitting solely facial challenges to legislation, notwithstanding its orbit with other "Social and Economic Rights and Duties." Courts in Spain have held that the constitutional "right to enjoy an environment suitable for the development of the person," falls outside the actionable private "rights" the constitution otherwise guarantees. Likewise, Namibia's environmental rights provision may only be enforced by an ombudsman, and citizens of Cameroon are not allowed to pursue environmental rights before the country's Constitutional Court. While South Africa's constitution guarantees a fundamental right to a clean environment, functionally open standing, and access to a constitutional court, that court has yet to enforce the right. Brazil's Constitution, with its aim to protect the Amazon Rain Forest, has among the most detailed environmental provisions of all national constitutions. Yet, it is doubtful whether its promise that all have "the right to an ecologically balanced environment, which is a public good for the people's use and is essential for a healthy life" will be enforced fully. Brazil's environmental constitutional provisions are yielding to high foreign debt and reliance on timber, crop, and cattle farming. Environmental rights provisions in Ecuador have underperformed for similar reasons. Likewise, environmental rights provisions in most of the former Soviet Bloc lie fallow in part because of economic, political, and social challenges.

From a comparative perspective what is to be observed is that courts across the globe are being called upon to adjudicate constitutional environmental rights with increasing frequency. Overall, cases from around the globe show that courts are engaging constitutional environmental rights provisions robustly, and as such are an increasingly potent force in the expansion of environmental constitutionalism globally.



REMEDIES

[The Constitution lays an] obligation on this Court to protect the fundamental rights of the people and for that purpose this Court has all incidental and ancillary powers including the power to forge new remedies and fashion new strategies designed to' enforce the fundamental rights. It is in realization of this constitutional obligation that this Court has in the past innovated new methods and strategies for the purpose of securing enforcement of the fundamental rights, particularly in the case of the poor and the disadvantaged who are denied their basic human rights and to whom freedom and liberty have no meaning.

Indian Supreme Court, Shriram Foods Case (1987)

Environmental cases are among constitutional law's most complicated to remedy because the injuries, as we have seen, can be multi-faceted with many inter-dependent and often moving parts, and with both short- and long-term consequences for the environment and for the humans who live, or will live, in it. And most courts are keenly aware of the limitations of their own power—of the fact —namely, that courts have no particular resource other than their own legitimacy to ensure respect for or compliance with judicial orders. And yet, courts have chosen to engage because they realize that, through coordination with other parts of government and in dialogue with both the public and private sectors, they can play a pivotal role in securing environmental rights.

This Chapter surveys the types of remedies courts have developed in the environmental cases where they have found liability for violation of constitutional rights. Despite the challenges, courts have been extraordinarily creative in designing remedies that are ambitious enough to be effective in remedying the environmental damage, yet defined and limited enough that defendants can implement them. Still, defendants—both official and private—can be recalcitrant, and we consider in the second part of the chapter the challenges that courts face in enforcing the remedies they have ordered.

A. State Obligations under the International Law Framework.

Internationally accepted ideas of the various obligations engendered by human rights indicate that all rights—both civil and political rights and social and economic—generate at least four levels of duties for a state that undertakes to adhere to a rights regime, namely the duty to respect, protect, promote, and fulfill these rights. This approach has been incorporated into many countries' environmental constitutionalism. The Philippine Court, for instance, has made clear that the State owes different levels of obligation: "a balanced and healthful ecology and to health are mandated as state policies by the Constitution itself, thereby highlighting their continuing importance and imposing upon the state a solemn obligation to preserve the first and protect and advance the second" The Dutch Constitution uses mandatory language. It states that "[i]t shall be the concern of the authorities to keep the country habitable and to protect and improve the environment," although, as we've seen, this provision has not been judicially enforced. Similarly, but more emphatically, the Constitution of Bhutan devotes an entire article to the protection of the environment, which, in addition to

imposing duties on citizens to safeguard the environment, also imposes these obligations on the government: "The Royal Government shall (a) protect, conserve and improve the pristine environment and safeguard the biodiversity of the country; (b) Prevent pollution and ecological degradation; (c) Secure ecologically balanced sustainable development while promoting justifiable economic and social development; and (d) Ensure a safe and healthy environment." The Chilean Court has, as has already been noted, already used the affirmative obligation in that country's constitution to hold the government liable for failure to protect, as has the Turkish administrative court. This echoes the levels of obligation that have been identified by some courts even in the absence of textual adumbration.

These levels of obligation require progressively greater commitment on the part of the government (and sometimes private parties). Yet, even the most moderate level may, in the hands of the right court, significantly constrain the government and obligate it to change its policies. For instance, licensing a company to clear-cut a forest may violate even the obligation to "respect" the environment.

Beyond that, under a constitution that requires the government to "protect" the environment, a court might require the government to take affirmative steps to create an environmental protection agency or to incorporate environmental concerns into its energy or economic development program. "Protection" could also require the government to take measures to ensure sustainability, since unsustainable development, by definition, fails to protect the environment.

A constitutional obligation to "promote" may authorize judicial orders not only to preserve, but also to improve the environment including, for instance, cleaning up a long-standing toxic waste site, reducing air or water pollution below current levels, and so on.

And finally, where the obligation to "fulfill" the right to a clean environment exists, a court may order the government to provide the means by which a clean and healthful environment can be enjoyed. For example, a government might be required to set aside land or waters as a nature reserve, or may be required to include green spaces within development plans for enjoyment by present and future generations.

Each of these levels requires not only increasing action from the State, but increasing resources as well. This is, of course, where the obstacles to judicial enforcement creep in. Plaintiffs are unlikely to sue where the payback is not worth the cost of litigation: if the most that can be gained under a "respect" case is the cancellation of one license, a putative litigant may not bother suing if it is likely that the government would simply issue another license to a different timber company the next year. Even if a plaintiff is successful in securing a judicial order mandating the development of an environmental plan, he or she may not have the resources to sue the following year to ensure that the plan is implemented. In some countries where environmental protection is most needed, it is least likely to be enforced for reasons of cost, if not also political will. Where millions live in deprived conditions with inadequate access to shelter and clean water, even a sympathetic court may not have enough muscle to force the government to "protect and improve the environment." In any of these situations, the remedy may run against private or public entities if the constitutional rules permit horizontal application of constitutional norms, as discussed previously.

B. The Range of Remedies

1. Preventing Further Environmental Harm.

In the narrowest cases where the environmental right is vindicated, the court denies the remedy on environmental grounds. In these cases, the claimant typically seeks to vindicate a property interest of some kind, and the environmental issue arises by way of defense; to vindicate the environmental interest, the court denies the remedy sought by the claimant. Under its prior constitution, the Hungarian Constitutional Court once rejected a proposed amendment that would have converted a protected forest into private land because it would have violated the constitutional right to a healthy environment to "the highest level of physical and spiritual health." For cases like this to be successful, environmental advocates within and outside the government must be vigilant in identifying property, business, and development-oriented litigation that nonetheless raises environmental concerns. In Venezuela, in the 1990s, the Supreme Court of Justice invalidated a mining lease on some forest lands that had been previously granted by the Mining and Energy Ministry because it had ignored environmental consequences. In that case, the forest sectoral service of the Mining Ministry had challenged the government's previous action.

2. Injunctions.

By far the most common remedy in environmental cases is injunctive relief aimed at stopping—and then remediating—the environmental degradation. Injunctions come in an almost infinite variety of shapes and sizes; a few of the most significant types are discussed here.

The most direct injunctions order the defendant to stop the activity that is producing the environmental harm. In one of the first cases brought by M.C. Mehta, the Indian environmental activist and lawyer, the Indian Supreme Court ordered the closure of the tanneries along a section of the Ganges because "life, health, and ecology have greater importance to the people" than the tannery work. In another case, the court enjoined mining activity on forest land even though the land came under the protection of the Conservation Act only after the mining license had been granted. The court explained that "the mining activities being a user of the forest land for non-forest purpose has to be stopped," and further required the defendant to obtain additional authorization from the central government under the Act if it intended to continue similar activities. Similarly, the Supreme Court of Nepal prohibited the use of diesel trucks in the city of Kathmandu and courts in Bangladesh have at times been particularly active in this regard.

Courts in Latin America have been willing not only to remedy existing problems but to intervene in proposed projects and development programs in order to vindicate environmental interests. The Chilean Supreme Court enjoined the construction of six hydroelectric dams on Bio Bio River because the project failed to comply with environmental standards, threatening both environmental and human rights. And in *CODEFF v. Ministry of Public Works*, the Court stopped the extraction of water of Lake Chungará for an irrigation project because it would have raised salinity levels in a UNESCO biosphere reserve.

In other Latin American cases, courts have authorized the destruction of private property if necessary to stop the despoliation of the environment. In *Donato Furio Giordano v. Ministry Of Environment And Natural Resources*, the Supreme Court of Justice of Venezuela ruled that the destruction of private property (where some septic tanks had been polluting marine water) was not only authorized, it was not subject to restitution or compensation as government destruction of property normally would be because of the environmental hazard that such property posed. And in a case brought by the Ecuadorian government to enjoin illegal gold mining in rivers, a provincial court held that given the failure of previous governmental efforts to stop the mining and based on the rights of nature, the government was authorized to destroy the mining machinery—an order which the government carried out with explosives a few days after the ruling.

Courts may also design injunctions not only to stop the threatened or ongoing degradation of the environment but to clean up or remedy damage that has already occurred. This may involve removal of debris, as it did in *Rural Litigation and Entitlement Kendra v. State of Uttar Pradesh*, where the Indian Supreme Court ordered lessees of lime stone quarries to "remove whatever minerals found lying at the site or its vicinity, if such minerals were covered by their respective leases and/or quarry permits." The Court mandated the removal be completed by the lessees within four weeks.

Courts seem to be more likely to require immediate action when not only environmental rights are at stake but human rights as well. In the lime quarry case, the court held that "Article 21 of the Constitution guaranteeing the right to life must be interpreted to include the right to live in a healthy environment with minimum disturbances of ecological balance and without avoidable hazard to [the people] and to their cattle, homes and agricultural land and undue affection of air, water and environment." It was likely the harm to the local residents that prompted the court's order of immediate action. Likewise, in *Aurelio Vargas v. Municipality of Santiago*, the Supreme Court of Chile ordered the clean-up of a garbage dump within 120 days because of health considerations to neighboring residents. Where the harm to humans can be documented, defendants may be required not only to remediate but also to compensate the individuals for injuries incurred or likely to be incurred. In one Colombian case, where toxic fumes emanated from an open pit, defendants were required "to remediate the site and to pay past and future medical expenses to those who became sick." The Court said it violated the right to life of local residents, even though the evidence concerned threats to their health, but not to their lives.

Some injunctions raise more complex separation of powers questions because they require not only a change of practice but also a change of policy. In some cases, courts have required governments to reorganize their bureaucracies with jurisdiction over the environment. Courts in the sub-Indian continent have been most active in this areas. In Ashgar Leghari, the High Court of Lahore established a climate change commission, and later dissolved it in favor of permanent institutional responses to climate change. In two cases from 2017, the state court in Uttarakhand, India, established a Nature's Rights Commission, and identified individuals who would stand in *loco parentis* to represent the interests of rivers and glaciers. (A similar result occurred legislatively in New Zealand).

In one case involving the adverse environmental effects of an electrical grid, the Supreme Court of Pakistan—instead of balancing the claims of competing stakeholders itself—ordered a *private* engineering consultant company, NESPAK, to manage the process. "In

the problem at hand the likelihood of any hazard to life by magnetic field effect cannot be ignored. At the same time the need for constructing grid stations which are necessary for industrial and economic development cannot be lost sight of," the Court explained. Because the government had proceeded without any attention to the hazards the grid might cause to human health, the Court appointed, "NESPAK as Commissioner to examine and study the scheme, planning, device and technique employed by [the government] and report whether there is any likelihood of any hazard or adverse effect on health of the residents of the locality." The government was then ordered to submit all the relevant information to NESPAK. The Court required the government in future cases to issue public notices and invite objections (orally or in writing) prior to installing or constructing any grid station or transmission line; this was to continue until such time as "the Government constitutes any commission or authority as suggested above."

Courts have also ordered governments to create environmental plans where none previously existed. In fact, it has been argued that one of the principal benefits of constitutionalizing environmental rights is to create the political pressure necessary to compel governments to adopt statutory frameworks to protect the environment. In Nepal, the Supreme Court ordered the government to formulate national policies to protect objects of religious, cultural, and historical importance in keeping with environmental standards.

In other cases, the court limits itself to compelling further study of an environmental problem, as has happened in Sri Lanka and elsewhere. Some of these orders designate the timing, process, format, or contents of the study being ordered in order to minimize the government's tendency to avoid the obligation or delay in its execution. In the Sri Lankan case, the court ordered that the mining interest was not permitted to enter into any contract relating to a particular phosphate deposit until the government conducted "a comprehensive exploration and study." The court prescribed in detail some of the contents of the study, insisting that the study be done in consultation with the National Academy of Sciences of Sri Lanka and the National Science Foundation, and further requiring that the results of the study be published. As usual, the Indian Supreme Court has been painstaking in directing the process of public participation, ordering committees of experts to investigate the environmental implications of projects, In at least one case, requiring the clean-up of a mining site, the Indian court identified the particular individuals who should or should not be involved: "Such removal will be carried out and completed by the lessees within four weeks from the date of this Order and it shall be done in the presence of an officer not below the rank of Deputy Collector to be nominated by the District Magistrate, Dehradun, a gazetted officer from the Mines Department nominated by the Director of Mines and a public spirit[ed] individual in Dehradun . . . " In a Colombian case involving the rights of marginalized people who earned their living by searching through trash to find recycled items to sell, the court ordered the formation of a committee within 2 weeks of the judgment to determine how best to integrate the recyclers into the formal economy, identifying the groups and interests who would be represented on the committee, including, unsurprisingly, representatives of the recyclers' organizations. The committee, the court said, would participate in the design and implementation of a plan to include the recyclers into the local waste management economy and would design affirmative steps that must be taken to ensure their effective participation. The court further ordered the committee to submit a report to the constitutional court within seven months detailing not only its progress on the implementation of the plan, but the metrics it would use to determine the plan's effectiveness in "the process of inclusion and in the effective enjoyment of rights by the recyclers and their families." And

in a land use planning case from Austria, the administrative court insisted on the need to obtain an expert opinion about the environmental impact of a revision of the land use plan. Some of these remedial orders are related to or based on constitutionally entrenched procedural environmental rights.

Depending on the nature of federal-state relations in each country, judicial injunctions may issue against or in favor of sub-national units. In one case involving marine life, the Philippine Supreme Court upheld the power of local governments to promote the constitution's environmental values by capturing certain aquatic life in order to protect fish and corals.

Courts that are especially engaged in the vindication of constitutional environmental rights may issue elaborate injunctive orders that not only reflect real knowledge of the local conditions but deep empathy with the individuals affected by the balance of human and environmental interests. In an early Indian Supreme Court's environmental case, the court ordered the temporary closure of limestone quarries and further study to determine if they should be reopened and on what conditions. But, recognizing that the workmen employed at these quarries would be either temporarily or permanently "thrown out of work," the court insisted that "as far as practicable and in the shortest possible time, [they] be provided employment in the afforestation and soil conservation programme to be taken up in this area."

In another Indian case, the Supreme Court ordered the closure of stone-crushing businesses because of the environmental harm and damage to human life and health to nearby residents (as well as workers); but as stone crushing was already starting up in areas further from where people lived, the court ordered that additional lands be made available, and distributed by lots to those whose businesses had closed. As is common in the Indian Supreme Court, the court required reports by the responsible authorities and calendared a follow-up hearing.

The most far-reaching environmental case of the Indian Supreme Court was the *Godavarman* case. In 1995, T.N. Godavarman Thirumulpad filed a writ petition to protect the Nilgiris forest from deforestation from illegal timber operations. Rather than limiting itself to ordering relief for the claim asserted, the Court used the case to develop and manage a new national forest policy, maintaining continuing mandamus for more than 10 years, and hearing over 800 interlocutory applications in the process. Initially, the court "ordered all non-forestry activities, such as saw mills and mining operations, which had not received explicit approval from the central government to cease operating immediately" and it temporarily but immediately suspended all tree felling in almost all the nation's forests. But the court did not stop there: it also established a new forest policy, thereby arguably usurping the legislative role, and it "ordered investigations into various complaints of illegal mining operations" thereby exercising executive authority. According to one group of critics, "the Court made itself a director and an overseer of forest issues, involving itself in national and local forest protection, timer pricing, timber transport, licensing of timber industries, management of forest revenue, and enforcement of its own orders concerning forest law, all independent of the central and state governments." While the court may be praised for recognizing the dire necessity of developing and enforcing a serious forest policy, it is criticized for taking on the responsibility itself rather than ordering the central and local governments to act, even according to constitutional principles.

This is particularly problematic in the context of an issue as broad and complex as forest policy, where the conditions vary from region to region around the country, and where the implications are significant not only for purposes of economic growth and development but for the human rights of those who live near, within, and in reliance on the nation's forests.

Another landmark constitutional environmental cases, producing one of the most elaborate remedial orders ever involved Argentina's Matanza-Riachuelo river basin. In 2008, the Supreme Court of Argentina ruled in favor of a group of residents who had sued 44 companies as well as governmental authorities at the local, provincial, and national levels to demand clean up of the river basin, which has been the most contaminated in the country.

The Court's order was directed at all levels of government and at certain private parties who were deemed to have contributed to the disastrous condition of the river basin. The Court fully understood that remediation would take years and require the commitment and cooperation of many different entities and, in fact, it was only in response to the judicial reprimand that the Argentine Congress developed a plan to coordinate the clean up and allocated funds for its effectuation. Still, the pace of clean-up has been slow. According to one report, "There is an environmental management plan, but not much has been done, and the river is still contaminated. The Supreme Court has issued several follow-up judgements as a response to the lack of compliance. Judicial control of the implementation of the judgement seems to have been important to ensure compliance with the judgement."

In the *Manila Bay* case, the Philippine Supreme Court issued a comprehensive 12-point injunctive order, which directed not only the results to be accomplished; but the process to be used to ensure its accomplishment. The court's order required the meetings that government agencies must organize, studies to determine the adequacy of sewage facilities, that violators of environmental laws and regulations be apprehended, that licensing requirements be enforced, and so on. The Court also ordered the Education Department to "integrate lessons on pollution prevention, waste management, environmental protection, and like subjects in the school curricula of all levels to inculcate in the minds and hearts of students and, through them, their parents and friends, the importance of their duty toward achieving and maintaining a balanced and healthful ecosystem in the Manila Bay and the entire Philippine archipelago." Most of these requirements flowed from the statutory and regulatory framework but they were enacted, and enforced in this case, to vindicate the constitutional environmental right to a clean environment.

The Philippine Supreme Court is not the only court to require public information about environmentalism as a part of a remedial plan. In a landmark case involving noise and air pollution caused by vehicles in the city of Dhaka, the Bangladeshi Supreme Court directed the government to publicize "through print and electronic media" the extant legal requirements and to "proceed against the vehicle operators by taking penal action if they fail to remove such types of prohibited horns after the expiry of the period of 30 days." In the judicial orders regarding the replacement of diesel engines in government and other transport vehicles, the court ordered the government to "give publicity to the directions of this Court in print and electronic media on consecutive two days twice in a week for one month." In *Karnataka Industries*, the Indian Supreme Court articulated the importance not only of environmental improvement but of what might be thought of as environmental acculturation: "The importance and awareness of environment and ecology is becoming

so vital and important that we, in our judgment, want the appellant to insist on the conditions emanating from the principle of Sustainable Development." To implement these principles, the Court directed that "in future, before acquisition of lands for development, the consequence and adverse impact of development on environment must be properly comprehended and the lands be acquired for development that they do not gravely impair the ecology and environment." Such comprehension on the part of all the stakeholders requires that information be made available to all in advance of any decision that would adversely affect the natural environment.

As with the Indian Supreme Court's continuing mandamus, the Bangladesh court also required the government to "submit reports every six months of actions and results of the ... above directions to this court."

Despite the range and variety of judicial orders and the extraordinary efforts that some courts have made to ensure compliance with their orders, courts do realize that environmental rights are usually considered socio-economic rights which, in many systems, are not subject to individual demand or amenable to immediate implementation. In Mazibuko v. City of Johannesburg, the South African Constitutional Court explained that the constitutional right to water "does not require the state upon demand to provide every person with sufficient water without more." Rather, the court said, "it requires the state to take reasonable legislative and other measures progressively to realise the achievement of the right of access to sufficient water, within available resources." Indeed, the Constitution itself requires that "The state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of each of these rights." The Mazibuko court explained that a state's compliance with this requirement would be measured by the reasonableness of its efforts, not by their success. While this disappointed many South African activists, the court maintained that courts "[A]re ill-suited to adjudicate upon issues where Court orders could have multiple social and economic consequences for the community. The Constitution contemplates rather a restrained and focused role for the Courts, namely, to require the State to take measures to meet its constitutional obligations and to subject the reasonableness of these measures to evaluation."

Thus, a litigant may always argue that the state has failed to develop a policy concerning the right-viz. environmental protection-or that the policy has not been adequately revised and updated, and has been allowed to lie dormant. However, the Court emphatically rejected the notion that socioeconomic rights contain a particular "minimum core" which must be respected or provided in the legislative plan. The Colombian Constitutional Court has also adopted the principle of progressive realization, noting that it requires, at a minimum, for the state to provide a plan for the effective enjoyment of the right. (The idea of progressive realization derives from the International Covenant on Economic, Social and Cultural Rights which provides that: "Each State Party to the present Covenant undertakes 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 realisation of the rights recognised in the present Covenant by all appropriate means, including particularly the adoption of legislative measures." While sourced in international law, it has been incorporated into the constitutional jurisprudence of many countries. In the South African Mazibuko case, for instance, the Court explained that: "The concept of progressive realisation recognises that policies formulated by the state will need to be reviewed and revised to ensure that the realisation of social and economic rights is

progressively achieved.").

Progressive realization—though not named as such—may also be seen in the continuing injunctions that many courts have issued in environmental cases. In the Bangladeshi industrial pollution case, the court ordered some existing industrial units and factories to adopt "adequate and sufficient measures to control pollution" within one year and others within two years, and in every case to report back to the court; it further ordered that no new industrial units and factories be, at any time in the future, "set up in Bangladesh without first arranging adequate and sufficient measures to control pollution." This process instantiates and adapts to local conditions the principles of progressive realization.

In some cases involving future development, the Supreme Court of India has insisted that certain specified conditions be satisfied before land can be acquired or plants can be reopened. And in one notable case from Pakistan—initiated when a member of the court saw a newspaper notice about dumping of nuclear waste along a coastal area, which turned out to be unfounded—the court ordered not only that a list of all persons to whom coastal land had been allotted be submitted to the court but also that the state government submit the particulars of any application for future allotment of coastal lands. The Court took these actions because "[t]o dump waste materials including nuclear waste from the developed countries would not only be [a] hazard to the health of the people but also to the environment and the marine life in the region."

Perhaps recognizing the limits of the judicial power, some of these courts have included in their mandatory orders provisions that are merely hortatory. In the Pakistani case, the court also suggested that the responsible authorities "should insert a condition in the allotment letter/license/lease that the allottee/tenant shall not use the land for dumping, treating, burying or destroying by any device waste of any nature including industrial or nuclear waste in any form." In the Lahore Pollution case, the court went further and included a list of "suggestions... for formulating the policy and relevant rules and law." In the Manila Bay case, the Philippine court required the budget department to "consider incorporating an adequate budget in the General Appropriations Act of 2010 and succeeding years to cover the expenses relating to the cleanup, restoration, and preservation of the water quality of the Manila Bay." And in the groundwater pollution case, the Indian Supreme Court asked the government to consider whether "chemical industries should be regulated separately and whether the siting of both new and existing plants should be revisited, given the waterintensive nature of the activities." While the language was hortatory, the court insisted that the government's quarterly reports include reference to these considerations. The extent to which these admonitions are in effect is a function of the relationship between the political authorities and the court.

Hortatory or suggestive orders may be particularly appealing to courts when enforcing directive principles of state policy that may be explicitly exempt from judicial review. In one such case, the Supreme Court of Nepal issued "a directive order … to His Majesty's Government … to monitor whether the concerned authorities are complying with [both international and domestic laws], and then to take actions for maintaining uniformity in protecting all areas by formulating national policies regarding objects of religious, cultural and historical importance." But, reflecting some impatience, the court demanded to see not only the efforts but the results: "It is not sufficient to state, in its written statement, that the government is alert about protection. Commitment should also be reflected by action

and creation of public awareness. Plans adopted since 1954 should be evaluated for how successful they have been."

Most injunctive remedial orders reflect well-recognized environmental law principles and values, including especially the precautionary principle and the norm that polluters pay for the costs of remediating the environmental harms they have caused. Some of these obligations are imposed as a matter of international law; the Treaty for the Functioning of the European Union, for instance, states that "Union policy on the environment ... shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay." Many governments have incorporated these principles into their framework laws and courts that are sensitive to the peculiarities of environmental damages have been quite willing to adopt them as a matter of their own domestic constitutional law. In seeking to protect the Taj Mahal, for instance, the Indian Supreme Court said, "the 'primary duty' of the government and its Ministry of Environment was to 'safeguard' the monument." That court has further explained the policy underlying the polluter pays principle in this way:

The Polluter Pays principle demands that the financial costs of preventing or remedying damage caused by pollution should lie with the undertakings which cause the pollution, or produce the goods which cause the pollution. Under the principle it is not the role of Government to meet the costs involved in their prevention of such damage, or in carrying out remedial action, because the effect of this would be to shift the financial burden of the pollution incident to the taxpayer.

Another option, which has not been sufficiently developed, would be to require those whose activities may impact the environment to take out ecological insurance.

3. Damages

In Colombia, as in other jurisdictions, the framework environmental laws permit damages to compensate for the misuse of natural resources, as well as punitive damages in some cases. A 1993 law, which the Constitutional Court upheld in 1996, also permits the application of retributive taxes on those whose activities contribute to environmental deterioration or unsustainability, such as in the case of waste dumping, as well as compensatory taxes and taxes for the usage of water. The court explained that a retributive tax is an obligatory payment imposed not for services provided but for the damage caused to the environment; it has, in that sense, the character of an indemnity.

Colombian law creates a more elaborate set of sanctions including preventative, compensatory, and punitive damages than is available in most other countries; this statutory scheme was upheld in 2011 against charges that the damage awards were ill-defined and that the law subjected defendants to liability multiple times for the same infraction. In an extraordinary opinion that recites at length the obligations that every country has to nature and to future generations, the court explained that "nature is not limited only to the environment surrounding humans, but also is a subject with its own rights which must be protected and guaranteed." Consequently, the court held, a statutory scheme that imposes compensatory damages as well as restitution and that aims to restore nature to its previous condition is fully consistent with both constitutional and international law (including treaties to which Colombia is a party as well as those to which it is not). The

defendant is usually in a better position than the plaintiff—particularly where the latter are individuals or non-profit organizations suing on behalf of underserved populations—to remedy the environmental harm because the defendant is likely to have significantly greater resources and means.

But, absent explicit constitutional or statutory authorizations, damages are not typically apt remedies for constitutional environmental violations. Damages shift the cost of engaging in objectionable behavior, but they put the burden of remedying the problem on the plaintiff. In environmental cases, however, courts that have been receptive to plaintiffs' complaints are more likely to try to remedy the harm that has been done to the environment than merely make it more costly to harm it; a damage award does not help the broader swath of people who are affected by the environmental degradation, or future generations, or the environment itself. Moreover, where the defendant is the government, as is typically the case in constitutional litigation, courts may be hesitant to exact costs from the national treasury if doing so would result in a windfall to the plaintiffs, particularly where the injuries are widespread and affect more people than those who litigated. Government defendants may also be immune from damages awards under constitutional or statutory authority. Damage awards in environmental cases can also lead to additional and prolonged litigation about the size of the award, particularly when there are significant resources at stake, as for instance in the epic litigation in Ecuador against Chevron/ Texaco. In such cases, civil suits for damages may be authorized but need to be filed and pursued separately. Even in these jurisdictions, however, costs may be awarded. Finally, there are constitutional cultures, particularly in Asia, in which damage awards are rare in general and no more common in environmental cases.

Where they are permitted, a damage award may be a part of a remedial order, but in few cases does it completely resolve the controversy.

4. Compliance Orders

Courts in many countries have available to them something akin to a writ of mandamus—a judicial order that requires the defendant to satisfy a pre-existing duty. Often, plaintiffs seek such a writ in part because compliance is more readily ensured, and in part perhaps because they truly believe that defendants are under a legal obligation to take a particular action. However, courts can be reluctant to use the writ if the legal duty is not "definite and fixed," as the Supreme Court of Nepal said. In one case from the Philippines, the Supreme Court dismissed a petition seeking mandamus because, even though the corporate defendant may have violated the fundamental right to clean air, the legislature had not specifically required the use of natural gas and so the court could not require it by way of mandamus. Indeed, the power of the writ of mandamus may come from the court's inherent authority in certain cases or it may come from the mandatory language of a statute. In the Philippines, the court required all the government entities involved in remedying the pollution in Manila Bay to submit a quarterly progressive report "in line with the principle of 'continuing mandamus." In Ratlam v. Vardhichand, the Supreme Court of India compelled a municipal council to carry out its duties to the community by constructing sanitation facilities, pursuant to clear and mandatory statutory authority. The Court ordered the municipality—under penalty of imprisonment—to construct the drains and fill up cesspools and other pits of human and industrial waste, notwithstanding the municipality's claimed penury. The court observed, "[t]he Criminal Procedure Code operates against statutory

bodies and others regardless of the cash in their coffers, even as human rights under Part III of the Constitution have to be respected by the State regardless of budgetary provision." And yet, according to a subsequent report, at least eight agencies are jointly responsibility for some aspect of Delhi's drainage and sanitation infrastructure, leading not to overenforcement but to under-management and to significant health hazards for the nearly four million people who open storm-water drain systems for waste disposal. "These open drains," according to this report, "experience blockage and over-flooding from excessive waste and are a growing safety and health concern throughout populated regions of Delhi/NCR." A number of injuries have resulted when people accidentally fall into the open drains.

It may seem odd or unproductive to expend resources to ask a court to order the government to do what it is already obligated to do. But this strategy can produce dividends. In India, for instance, "[t]he main thrust is to substitute the ineffective administrative directives issued by the pollution control boards under the Water Act and the Environment (Protection) Act, with judicial orders, the disobedience of which invites contempt of court action and penalties." Government's nonfeasance in the first place invites judicial review, with the burden usually falling on the party challenging the action and with the typical deference to coequal branches of government; government's failure to comply with a court order, however, shifts the burden to the government to justify its nonfeasance and removes any presumption in favor of the government that might otherwise exist. It also eliminates separation of powers concerns that might otherwise deter judicial involvement.

5. Imprisonment

Where none of these remedies is sufficient to vindicate environmental rights, repair the damage to the environment, and deter or prevent further abuses, some courts have resorted to the ultimate penalty of imprisonment. In one case, from Antigua and Barbuda, the High Court of Justice ordered sentences of one month each to three government officials for violating a previous interim injunction that sought to forbid a company, Sandco, from mining sand. The Ministry of Mining officials mined the sand instead but then sold it on the spot to Sandco, which the court found to be a clear violation of the interim injunction. Imprisonment under certain circumstances may be statutorily authorized, as in such Indian framework laws as the Water (Prevention and Control of Pollution) Act of 1974, the Environment (Protection) Act of 1986, and the Air (Prevention and Control of Pollution) Act of 1981.

The variety and flexibility of tools in these courts' remedial toolkits facilitate judicial involvement in the vindication of constitutional environmental rights even in situations where courts might otherwise be tempted to yield to principles of comity and to succumb to concerns about their own legitimacy. But in the words of the Indian Supreme Court—certainly the institution with the longest-term and deepest commitment to the creative remediation of environmental degradation—"the correct exposition of law in a modern welfare Society" prohibits the court from sitting "idly by" while officials abdicate their legal responsibilities. "The law," the Court has said, "will relentlessly be enforced and the plea of poor finance will be poor alibi when people in misery cry for justice. The officers in charge and even the elected representatives will have to face the penalty of the law if what the constitution and follow—up legislation direct them to do are denied wrongfully. The wages of violation is punishment, corporate and personal." Clearly, courts have a range of remedies from which to choose in giving effect to environmental constitutionalism.

C. Challenges to Enforcement

Enforcement of judicial orders, particularly in environmental cases, is rarely without its obstacles. In the first Ecuadorian rights of nature case, for instance, the government had taken no steps in the year after the court order to implement the order to clean up the damage done to the river and adjoining property, notwithstanding clear directions from the court, forcing the litigants to pursue follow-up enforcement actions.

Remedial orders in constitutional environmental cases are among the most difficult to enforce for several reasons. First, as we have seen, injunctive orders can be multi-faceted and extensive, often requiring multiple entities to coordinate action. Second, they can be time-consuming in both the long-and short-term. The development of a plan may take months but its full implementation may take years or go on indefinitely. Third, environmental regulation in general comes at the expense of other important societal goals such as development and industrialization, which are the primary interests of most defendants, both private and public. And these defendants almost invariably constitute the power and economic elite of the country. In combination, these conditions provide ample incentive to defendants who would prefer to ignore or avoid judicially-imposed obligations.

In response, courts have developed certain practices aimed at overcoming these challenges. As we have seen, courts in some countries will regularly require reports and other indications of progress. They also often retain jurisdiction over the cases to facilitate plaintiffs' efforts to hold defendants responsible, often explicitly inviting further litigation to ensure compliance. In one case involving industrial pollution, the Bangladesh Supreme Court asserted that the environmental advocacy group, BELA, which had brought the suit, was "at liberty to bring incidents of violation of any of the provisions of the Act and the Rules made there under to the notice of this court." In that case, the Court also said that "the respondents were at liberty to approach this court for directions as and when necessary so that the objectives of the Act can be achieved effectively and satisfactorily." In some situations, courts have remained alert to persistent controversies resulting from their decisions and have had to issue increasingly emphatic follow-up judgments to compel compliance, as has happened in the Colombian cases involving the livelihood of recyclers and the Pakistani case involving pollution in the city of Lahore.

Where courts have maintained their vigilance, there have in some cases been notable successes. As a result of the landmark *Minors Oposa* decision, it has been claimed, "Logging concessions were withdrawn and abandoned at such a pace that the one hundred and forty-two concessions that existed when Oposa first took up the issue had shrunk to three by 2006." And the Manila Bay litigation has led to improved conditions.

Ensuring enforcement of court orders is difficult, though not impossible to do. The history of environmental litigation, constitutional and otherwise, is littered with examples of abandoned litigation. Indeed, one commentator contends that the *Oposa* litigation was never fulfilled because the original plaintiffs did not pursue the matter after the Philippine Supreme Court's remand. In Chile, where indigenous and other groups were able to stop construction of dams on the Bio River in the early 1990s because of failures to comply with regulations, the government was able, within 10 years, to pursue construction of other dams when the

additional hurdles were overcome. The moderate victory is the increased participation of the affected communities and increased sensitivity to environmental concerns as new and ongoing hydroelectric projects are pursued. In Nepal, the nongovernmental organization Pro Public has been forced to adopt "a comprehensive strategy for obtaining compliance" with court orders.

Litigating claims borne in environmental constitutionalism requires a continued commitment not only on the court's part but also on the part of the plaintiffs who originally brought the suit or their successors. And this is problematic as well: continued vigilance on the part of plaintiffs privatizes the burden for securing what is clearly a public good and it requires the plaintiffs to ensure, on an ongoing basis, that the government takes responsibility for the environmental violation, and that the government complies with the rule of law as mandated by the judicial branch. Enforcing even favorable judgments thus requires significant resources on the part of the original litigants and their lawyers. As the Bangladeshi organization, BELA, has said: "winning a court case is only the first step."



ENVIRONMENTAL DIGNITY RIGHTS

Here we explore the increasing and ineluctable shift toward greater consciousness of the toll that environmental degradation takes on human beings and, by extension, on their ability to enjoy their human rights including, especially, their right to human dignity.

To many, it might seem obvious that one can not realize human dignity in an unhealthy environment: ask people who live near toxic dumps and experience higher than normal rates of cancer or in deforested areas whose shelters get washed away in the rains, or anyone who has lost a home, a limb, or a loved one in record-setting freezes, droughts, fires, and storms. Environmental degradation diminishes individual and collective dignity.

Courts are recognizing the impacts of environmental degradation and climate change on constitutionally-protected rights to dignity. For example, the court in *Ghemre v. Shell Petroleum Development Company Nigeria*, upheld a claim by farmers that allowing petroleum companies to 'flare' unused natural gas in the Niger Delta contributed significantly to air pollution and diminished individual and collective constitutional rights to dignity: "the inherent jurisdiction to grant leave to the applicants to apply for the enforcement of their fundamental rights to life and dignity of the human person as guaranteed by [] the Constitution of the Federal Republic of Nigeria ... and moreover, that these constitutionally guaranteed rights inevitably include the right to a clean, poison-free, pollution-free healthy environment." More courts, led by those in Pakistan, are drawing a line between human dignity and environmental rights.

This chapter explores these lines in four sections. Section A provides an overview of dignity as a legal right. Section B explains the interrelationship between dignity rights, environmental rights and climate justice. Section C discusses how environmental constitutionalism can advance dignity rights. Section D then examines the limited but important and emerging role that environmental dignity rights play in advancing environmental outcomes in courtrooms around the globe thus far.

A. Dignity Rights

Although originally a philosophical and religious concept, dignity is a legal right that is enforceable in courts around the world. The first, most important recognition of human dignity in a legal instrument is in the 1948 Universal Declaration of Human Rights, whose preamble begins with an acknowledgment of every person's dignity: "Whereas recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world."

Human dignity then descended into the next generation of international law in the common language of both International Covenants, which begin by recognizing that the rights enumerated therein "derive from the inherent dignity of the human person." It is the common ancestor to all modern human rights, informing and implicating most other human rights at the international and national levels.

By now, more than 160 of the world's constitutions have incorporated dignity not only as a foundational value but also as a right and hardly a new constitution is adopted without reference to the right to dignity. It can be a stand-alone right that is eternal, foundational, implied in life. or a mother right whose progeny has constitutional status. Sometimes, it is associated with other important rights of vulnerable groups, such as the rights of prisoners, of women and children, of the disabled, and so on. It can be conceptualized simply, but profoundly, as the right to have rights.

These textual bases have spawned a concomitant growth in dignity jurisprudence, as courts in Latin America, Europe, Asia, Africa, the Middle East, and North America have developed a robust jurisprudence of dignity on subjects as diverse as health care, imprisonment, privacy, education, culture, sexuality, and death, and more recently, environmental degradation and climate justice.

B. Dignity and the Environment

Human dignity and environmental outcomes are inextricably intertwined. In 2015 more than 190 nations of the U.N. General Assembly issued the 2030 Agenda for Sustainable Development. Effective January 1, 2016, the 2030 Agenda identifies mitigating environmental harm and advancing human dignity as core Sustainable Development Goals (SDGs). Moreover, the United Nations Human Rights Commission's recently appointed an Independent Expert and then a Special Rapporteur on Human Rights and the Environment, who has since documented the myriad ways in which the degradation of soil, water, and air by pollution, overfishing, deforestation, climate change, diminishes human rights. All of these are associated with the right to human dignity.

The effects of climate change provide vivid examples of how environmental conditions affect human dignity. Climate change "directly and indirectly implicates" important human rights responsibilities because it "connects the many dangerous climate impacts to the human rights commitments states have already undertaken." The right to life is increasingly threatened as floods, landslides, and fires become more common and more severe; the right to health is impacted when droughts makes access to food less secure or when pollution makes potable water less available; rights relating to property (including agricultural, inheritance, and development) are threatened when rising sea levels erode land; cultural rights may be threatened by reckless logging, overfishing, or mining, as may be labor and employment rights — to give just a few examples.

And, as is so often the case, people who are already vulnerable to human rights abuses are made more so by environmental degradation: those who are less likely to be politically protected and who have fewer resources to protect themselves – including women, poor people, ethnic minorities, and children – are most likely to be subject to this panoply of environmentally-generated human rights abuses. They have fewer options to avoid the effects of climate change, and fewer means with which to combat them. When land erodes or ceases to be fertile, they move to cities, where their communities are diminished and where they may or may not find employment, shelter, and services and where they are more likely to find themselves physically and psychologically in danger. If they have no cities to move to, like the former residents of the Cataret Islands, they become climate refugees, sometimes for generations.

And yet, the law can sometimes be slow to catch on, particularly when the impacts are most acutely and chronically felt by the most marginalized communities. While some changes have taken place at the international level – including the development of a strong global and regional body of international procedural law to protect environmental rights – attention to human rights in international instruments is still scant: At the COP21 talks in Paris at the end of 2015, negotiators wrangled over the relationship between human rights and climate change; the issue proved so divisive that references to human rights were included in the preamble but not in the substantive provisions of the document. This confusion and lack of consensus reflect inattention to the varied and profound ways that climate change threatens human rights throughout the world and in particular the right to human dignity.

C. Dignity Rights and Environmental Constitutionalism

Environmental constitutionalism can provide a framework for appreciating the interrelationship between human dignity and environmental outcomes. In 2015, and then again in 2018, the Lahore High Court in Pakistan recognized the indivisibility of environmental and human rights and the centrality of environmental human rights in the constitutional landscape.

"Fundamental rights, like the right to life (article 9) which includes the right to a healthy and clean environment and right to human dignity (article 14) read with constitutional principles of democracy, equality, social, economic and political justice include within their ambit and commitment, the international environmental principles of sustainable development, precautionary principle, environmental impact assessment, inter and intra-generational equity and public trust doctrine. Environment and its protection has taken a center stage in the scheme of our constitutional rights."

But the Court also recognized the urgent threats that the global climate situation pose to human beings.

"It appears that we have to move on. The existing environmental jurisprudence has to be fashioned to meet the needs of something more urgent and overpowering i.e., Climate Change. From Environmental Justice, which was largely localized and limited to our own ecosystems and biodiversity, we need to move to Climate Change Justice. Fundamental rights lay at the foundation of these two overlapping justice systems. Right to life, right to human dignity, right to property and right to information under articles 9, 14, 23 and 19A of the Constitution read with the constitutional values of political, economic and social justice provide the necessary judicial toolkit to address and monitor the Government's response to climate change."

Increasingly, courts are recognizing the necessity of a relatively clean environment to assure that people can live with dignity. The Nepalese Supreme Court recently said in the Godayari Marble case:

"Article 12(1) of the Interim Constitution has also incorporated the right to live with dignity under the right to life. It shall be erroneous and incomplete to have a narrow thinking that the right to life is only a matter of sustaining life. Rather it should be understood that all rights necessary for living a dignified life as a human being are included in it. Not only that,

it cannot be imagined to live with dignity in a polluted environment rather it may create an adverse situation even exposing human life to dangers."

Likewise, Kenya's Environmental and Land Court in Nairobi acknowledged that environmental rights must be read in light of the constitutional commitment to human dignity:

"The Preamble to the Constitution ... proclaims that the people of Kenya, when making the Constitution were committed to nurturing and protecting the well-being of the individual, the family, communities and the nation. Likewise, the national values and principles that bind this Court ... include human dignity, equity, social justice, human rights, non-discrimination, protection of the marginalized and sustainable development." In a Nigerian case about gas flaring, an intermediate court found that it had "the inherent jurisdiction to grant leave to the applicants to apply for the enforcement of their fundamental rights to life and dignity of the human person as guaranteed by sections 33(1) and 34(1) of the Constitution of the Federal Republic of Nigeria, 1999 and moreover, that these constitutionally guaranteed rights inevitably include the right to a clean, poison-free, pollution-free healthy environment."

D. Bringing Dignity Rights into Environmental Constitutionalism

We find that dignity is relevant in at least three phases of constitutional litigation: defining the cause of action, getting into court, and remedies, described below.

1. Defining the cause of action

One of the most pressing challenges for environmental constitutionalism is definitional. Most substantive environmental rights provisions are vague, which can deter judicial officers from applying them: judges are often unwilling to make judgments about what is a 'quality environment' or a 'healthy environment,' a 'sound' environment or a 'healthy and ecologically balanced human environment'. Applying these terms to a given situation can also be daunting: how can a court decide whether a timber licence violates a healthy environment, or whether pollution levels in a river or bay or in the air reaches a point where the air or water is no longer clean?

The further question of what counts as a violation of an environmental right can be equally perplexing. We have explained the problem previously:

"[I]dentifying the nature of the violation in environmental rights is a quixotic task. First, some environmental degradation is inevitable, so the baseline is not maximal enjoyment of the right but something less than that. No defendant can be held liable for air that is not pure or for the use of some non-renewable resources the way it can be held liable for even a small infringement of a traditional constitutional right. Indeed, most environmental law (including the principles underlying the public trust doctrine and sustainable development) is premised on the principle that some nature is to be consumed by humans – just not too much nor too selfishly."

Lexiconical challenges are marginally eased when the rights are procedural, allowing 'everyone' to 'be informed about the status of the environment and its protection' or to 'participate in the making of public decisions which have an impact on the environment."

Here, we believe, at least the procedural language is often more familiar and better understood, and the risks of over-enforcement are not as threatening: arguably, too much information or process improves, rather than detracts from, the democratic process. In the face of such interpretive challenges in environmental adjudication, dignity can alleviate the nebulous nature of environmental rights by providing a benchmark against which a violation or a remedy should be judged: in implementing, enforcing and vindicating constitutional environmental rights, dignity rights can contribute to a court's ability to determine when the right to a quality (or healthy or balanced) environment is violated. While all human activity impairs the environment, a constitutional violation would occur when the impairment impacts the dignity of those affected – a standard of evaluation that is loose, but still more familiar to the judiciary. Thus, for example, mining exploration may be inevitable or necessary, but should be constitutionally permitted only when it respects the dignity of those who live near or work in mines. Timber licences could be issued, but not if clearcutting impairs people's ability to live with dignity among trees for the resources and protection they provide. Dams could be constructed to provide electricity, but would have to be built without diminishing the dignity of the individuals or communities whose lands would be flooded. Government policies that destroyed the aesthetic or recreational value of natural environments would also come under scrutiny for the impact they would have on the dignity interest in social and cultural self-development, for example.

Plaintiffs would still have to show harm, but the harm in question would be to their dignity interests – whether individual or collective, and whether sounding in civil and political rights or social, economic and cultural rights. A dignity-based definition of harm would apply similarly to procedural environmental rights: absolute transparency and infinite participation is impracticable, but information and opportunities to participate in environmental decision-making would need to be sufficient to enable those affected to exercise their civic dignity.

Such a dignity-based approach would enable courts to be more sensitive and holistic in pursuing a rights-protective role in both substantive and procedural terms.

2. Standing

Referring to dignity in environmental cases could also help to inform some of the thorniest problems of environmental constitutional litigation – including the identification of those with sufficient standing. For instance, reference to dignity can identify proper plaintiffs from among the legions who live within a particular environment: although all those who live within a catchment area might be affected by water pollution, they will be differently affected depending on their circumstances, and defining the relevant harm by reference to dignity will help to distinguish those potential plaintiffs whose rights have been violated from those who are impacted but not in a judicially cognizable way.

Dignity can also help provide context to the problem of proving causation. As we have previously explained:

"In all too many cases, divining the line between a problem and a cognizable injury – identifying when the proper use of river water becomes an abuse, or when the release of toxins becomes injurious to public health – requires courts to balance equities with little if any prescriptive guidance. This problem is magnified with the growing number of claims

relating to climate change, of which there is abundant evidence, but the evidence tying it to specific harms suffered by specific humans within a specific nation is much more tenuous."

Under this approach, a claim would be actionable when it could be shown that the environmental degradation itself caused the diminishment of human dignity: Did it meaningfully impair the plaintiff's ability to control the course of her life, to fully develop her personality? Did it diminish her in the eyes of others? Did it impair her ability to live in society with others, or to participate in and contribute to her social, cultural, or political community? Of course, demonstrating such diminution of dignity would need jurisprudential shaping.

3. Remedies

We have also previously explained some of the problems associated with remedies in constitutional environmental rights cases:

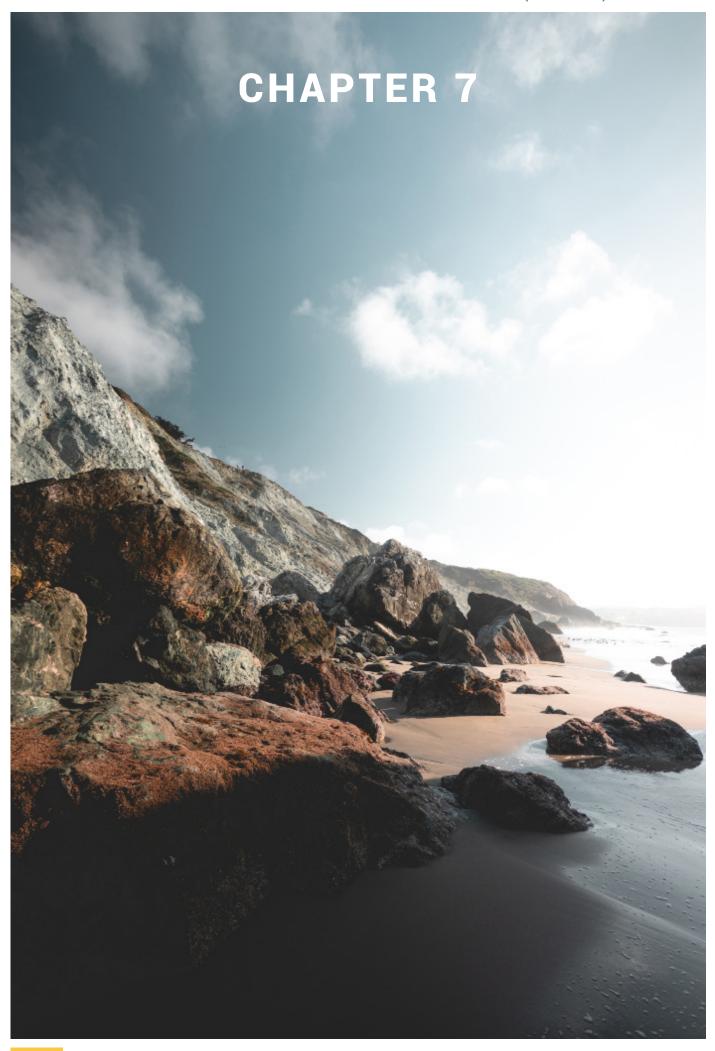
"Environmental cases are among constitutional law's most complicated to remedy because the injuries ... can be multifaceted with many interdependent and often moving parts, and with both short- and long-term consequences for the environment and for the humans who live, or will live, in it. And most courts are keenly aware of the limitations of their own power – of the fact, namely, that courts have no particular resource other than their own legitimacy to ensure respect for or compliance with judicial orders."

Dignity also functions as a countervailing requirement when environmental orders are issued: when the Supreme Court of India ordered the closure of tanneries that had been polluting the River Ganga, it required that the new operation protect the jobs and rights of the displaced workers, including requiring that they be paid during the period of closure and that they be given a substantial 'shifting bonus' to help them settle at the new location.

Similarly, when landfills were being closed in Colombia, the Court took special care to assure the dignity of those individuals whose only means of support had been collecting recyclables from the landfill. The Court's extensive remedial order required each affected municipality to, within a few months, adopt necessary measures to 'protect the recyclers' rights to health, education, dignified living, and food, ensuring in each particular case that the means were connected to specific social programs'. Such conditions serve both environmental protection and human dignity; this reference point to dignity could and should be made explicit.

Conclusion

Human dignity and environmental outcomes are inextricably intertwined. Attention to the needs of all those affected by environmental conditions evidences a respect for the equal dignity of each person, whether parties to the litigation or not. Reference to human dignity may therefore help to give some definition to the problems of interpretation, implementation, and enforcement. Courts that have difficulty defining permissible levels of water pollution may may be able to define a violation by whether the availability of clean water permits people to live in dignity. While courts may be reluctant to void all timber or mining licences, they may permit such licences where the activities may be conducted in ways that are consistent with human dignity. Dignity may be the best metric for environmental health and climate justice.



ENVIRONEMENTAL CONSITUTIONALISM AND CLIMATE JUSTICE

"Federal courts too often have been cautious and overly deferential in the arena of environmental law, and the world has suffered for it."

Juliana v. United States, No. 6:15-cv-01517-TC (D.Or. Nov. 10, 2016)(Aiken, J.)

Introduction

This chapter explores developments at the boundary between environmental constitutionalism and climate justice. We see two trends. First, a handful of countries address climate change expressly into their constitutions, led by the Dominican Republic, Ecuador and Tunisia. Second, a growing contingent of courts – led by those in Pakistan, the Netherlands, and the United States – have recognized that governmental action or failure to act on climate change can abridge a right to a healthy climate as implied by an express constitutional right to life, dignity or due process, or an emerging right to a healthy environment.

Section A provides some context to the concept of climate justice. Section B explains how some constitutions contain express provisions to address climate change, and arguably climate justice. Section C surveys recent judicial decisions addressing climate change and sounding in constitutional law. This chapter concludes that constitutional claims have significant potential for shaping how the rule of law can contribute to climate justice, especially at the domestic level.

A. Climate Justice

Climate justice promotes policies, practices and jurisprudence that do not disproportionately burden the world's most vulnerable people. Climate justice falls at the vertex of international, regional, national and the common law, basic notions of human and environmental rights, and human dignity.

The anticipated impacts of climate change are well known, which the United Nations Human Rights Council (UNHRC) recounts as follows --

"[T]he adverse effects of climate change 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 enjoyment of the highest attainable standard of physical and mental health, the right to adequate housing, the right to self-determination, the right to safe drinking water and sanitation and the right to development."

The Intergovernmental Panel on Climate Change (IPCC) has also detailed the impacts, adaptation, vulnerabilities and mitigation associated with climate change.

These effects, however, are not experienced equally everywhere by all global citizens. Suffice to say that most effects of climate change are more acutely experienced by those living in coastal communities, mega-cities, areas of conflict, drought or flood-prone areas, and by those living through sickness, disease, political or social strife, or poverty.

There are complementary and sometimes conflicting perspectives on how to advance climate justice. The international order has found it challenging enough to ensure social and environmental justice, not to mention climate justice. While engaging climate change in general, existing treaties — including the United Nations Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol, and the Paris Agreement — require implementation by ratifying nations to go into effect. Perhaps the Preamble to Paris Agreement comes closest to engaging climate justice:

Climate change is a common concern of humankind, Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity." But this provision too is unenforceable. Thus, international law mechanisms remain largely out of reach and irrelevant to most human beings seeking climate justice.

Moreover, UN Resolutions are not binding. The recently proposed Global Pact and the Third International Covenant on the Environment are inspirational and aspirational, but again, unenforceable. And even if they were, none address the particular risks that vulnerable people face in times of climate change. And there is, of course no Global Treaty on Climate Justice or similar accord.

Climate justice has fared hardly any better in law at the domestic level. As noted, only three of the world's constitutions address climate change in explicit terms, and legislatures have been slow to provide private causes of action to address or advance climate justice. In the United States — one of the countries most responsible for the earth's changing climate — the situation is made worse by the skepticism of the nation's top environmental enforcer of whether climate change is a real thing and, more recently, whether it "is a bad thing."

Moreover, subnational efforts to reduce greenhouse gas emissions and advance climate justice have largely failed. For instance, many efforts by subnational governmental agencies in the United States to impose carbon taxes, fuel efficiency requirements, or restrict greenhouse gas emissions have been found to be preempted by federal law, or otherwise to run afoul of the Commerce Clause of the U.S. Constitution.

Attempts to advance climate justice in the courts are replete with false starts and failures. In particular, common law notions of public and private nuisance, trespass, negligence and strict liability for abnormally dangerous activity have shown little capacity for advancing climate justice. A leading example comes from the United States in the case of *Native Village of Kivalina v. ExxonMobil Corp.*, in which an Inuit community living on an island that was likely to be submerged by rising sea levels induced by climate change filed a federal lawsuit against the world's largest producers of petroleum and natural gas, seeking \$40 million in damages to relocate to higher ground. But the lawsuit failed, when a federal court

found that a federal statute (the Clean Air Act) has 'displaced' the federal common law tort system, even though the statute did not provide the necessary protection. American courts have also found that federal law preempts common law claims to advance climate justice under subnational law.

Moreover, climate justice cases can also be thwarted by myriad additional constitutional defenses, including lack of justiciability, the standing doctrine, and (in the U.S.) procedural and substantive due process, which can limit both access to courts and the availability of damages to prevailing parties.

Simply, the dominant legal order has done little to advance climate justice. But, as the following sections explain, constitutionalism – either by express constitutional incorporation of climate change, or by inferring causes of action from other recognized constitutional rights – affords new theories that have the potential to take better account of climate justice.

B. Express Constitutional Provisions Addressing Climate Change

Express constitutional incorporation of provisions addressing climate change provides new avenues for advancing climate justice. These developments reflect the broader and steady accretion of global environmental constitutionalism, which explores the constitutional incorporation of environmental rights, duties, procedures, policies and other provisions to promote environmental protection. Indeed, about one hundred nations have seen fit to incorporate an express environmental right into their constitution.

Such environmental constitutionalism can provide new causes of action or stretch existing environmental rights into new forms. It can also serve to promote as human and environmental rights, procedural guarantees, remedies, and judicial engagement. Environmental constitutionalism also has normative spillover effects, and has been correlated with lower greenhouse gas emissions.

Yet environmental constitutionalism is still young in constitutional timeframes, and implementation has been inconsistent. Thus it has so far come up short in addressing "pervasive global environmental problems," such as climate justice.

Climate constitutionalism, however, offers at least two additional avenues for advancing climate justice. The first is by the express incorporation of climate change into constitutional text. In the absence of that, the second trend is to infer that other express constitutional rights to life, dignity, due process, or a healthy environment, impliedly incorporate obligations to respond to climate change.

Three countries have so far incorporated climate change into their domestic constitutions though it is being considered in other countries at this time. The Dominican Republic appears to be the first country to have made a constitutional commitment to address climate change by requiring policies to promote the use of renewable energy and to adapt to climate change. Ecuador amended its constitution in 2008 to adopt comprehensive climate mitigation measures, and to limit greenhouse gas emissions and deforestation, and promote the use of renewable energy. And Tunisia – which stands to lose up to one-

third of its land to climate change – entered the canon of climate constitutionalism in 2014, guaranteeing the "right to participate in the protection of the climate."

These provisions have helped to spur national action on climate change. For example, the Dominican Republic has developed a National Development Strategy that aims to reduce emissions of greenhouse gases by 25 percent by 2030. Ecuador engaged in a national campaign to convert to hydroelectric, wind and solar energy. And Tunisia was one of the first countries to adopt a climate action plan in advance of the Paris climate talks in 2015. These developments provide bases for considering climate justice in the national conversation about climate change.

C. Climate Constitutionalism and Justice in the Courts

There is a growing body of jurisprudence from international and regional courts and tribunals surrounding climate change worldwide, including a recent decision that recognizes climate change's disproportionate impact from the Inter-American Court on Human Rights. Yet almost none of it yet involves express provisions about climate change mentioned above, other than an advisory opinion from Ecuador upholding the constitutionality of a bilateral agreement between Ecuador and Peru seems to be an outlier. Yet an increasing number of courts have turned to other constitutional rights — such as the right to life, health or dignity — to advance climate justice, discussed below.

Constitutional rights to life and dignity have thus far played a prominent role in advancing climate justice in the courts. For example, as mentioned above, Ashgar Leghari v. Federation of Pakistan (2018) was brought under the Lahore High Court's continuing mandamus jurisdiction, assessing the work of the Climate Change Commission it had established pursuant to a ruling in 2015. In the 2015 decision, the court required the government to implement climate change mitigation and adaptation plans to fulfill a constitutional right to life and dignity. In the 2018 decision, the Court reviewed at some length the threats of climate change in Pakistan, considering its effects on water resources as well as forestry and agriculture, among other things but found that the Commission had been the driving force in sensitizing the Governments and other stakeholders regarding the gravity and importance of climate change and had accomplished 66 percent of the goals assigned to it. The Court then dissolved the CCC and established a Standing Committee to act, on an ongoing basis, as a link between the Court and the Executive and to render assistance to the government to further implementation. And as discussed in the previous chapter, a court in Nigeria turned to constitutionalized rights to dignity in upholding a claim associated with 'flaring' unused natural gas, thereby polluting the air and contributing to climate change.

Constitutional rights to health and welfare can also be used to advance climate justice. The leading case is *Urgenda Foundation v. Kingdom of the Netherlands*, where a trial court ordered the federal government to reduce greenhouse gas emissions and to mitigate the effects of climate change as a means of fulfilling constitutionally recognized rights to health and welfare. Similar actions are wending their way through federal courts in Norway, there challenging the government's grant of oil leases off the northern coast.

Oblique notions of 'due process' may form the basis for a constitutional claim to address climate change. Deprivation of due process can have substantive or procedural dimensions.

On the substantive side, the leading case is *Juliana v. United States*, in which a federal trial court held that the plaintiffs had a legally cognizable cause of action in to assert that the U.S. government's collective actions and inactions concerning greenhouse gas emissions deprived them of a "right to a stable climate" under the Due Process Clause of the 5th Amendment. In a case of first impression, the court agreed that plaintiffs pled a plausible cause of action, concluding: "Exercising my 'reasoned judgment,' I have no doubt that the right to a climate system capable of sustaining human life is fundamental to a free and ordered society." In finding that Plaintiffs had alleged an infringement of a fundamental right sufficient to withstand a motion to dismiss, the court noted --

"where a complaint alleges governmental action is affirmatively and substantially damaging the climate system in a way that will cause human deaths, shorten human lifespans, result in widespread damage to property, threaten human food sources, and dramatically alter the planet's ecosystem, it states a claim for a due process violation. To hold otherwise would be to say that the Constitution affords no protection against a government's knowing decision to poison the air its citizens breathe or the water its citizens drink."

The U.S. government found this decision so problematic that it took the extraordinary step of asking the 9th Circuit Court of Appeals intercept the case from the lower court and dismiss it without further proceedings. Oral argument occurred in December 2017. A ruling from the appellate court is pending.

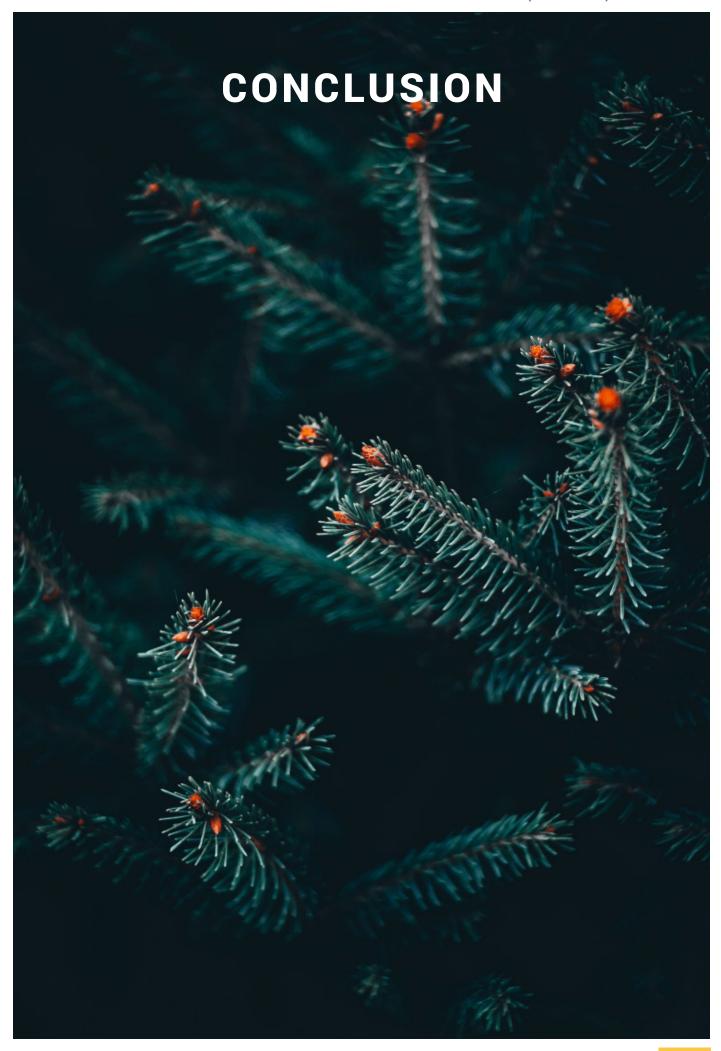
On the procedural side, the leading case is *In Re Application of Maui Electric Company*, in which the Supreme Court of Hawai'i held that the Hawai'i constitution's explicit right to a healthy environment is a protectable property interest under the Due Process Clause of the Hawai'i constitution. Accordingly, the Court held that Petitioner-Sierra Club is entitled to a due process hearing to challenge the Public Utility Commission's grant of a Power Purchase Agreement to continue to combust fossil fuels that it claims does not comport with the state's statutory goal to convert to 100 percent renewable energy by 2045. The Court also held that Sierra Club possesses constitutional standing to challenge the permit because the injury of its members is fairly traceable to greenhouse gas emissions.

Some courts have turned to express environmental rights provisions to resolve climate justice-based claims. For example, in *Earthlife Africa Johannesburg v Minister of Environmental Affairs*, an ENGO appealed the issuance of a permit to build a large coal-fired power station without having considered the climate change impacts. The Court considered the regulations and the environmental management act in light of South Africa's constitutional environmental rights provision and under international law. The Court held that even in the absence of an express obligation to consider climate change, the ministry is nonetheless required to consider all the relevant issues and this includes climate change and to do so before, and not after, the permit is issued.

Other constitutional dimensions have occasionally come into play in cases involving climate justice. For example, *Teitiota v Ministry of Business Innovation and Employment* involved an application for refugee status for natives of Kiribati displaced by climate change. However, the Court found that the applicant did not face "serious harm" and that there was no evidence that the Government of Kiribati is failing to take steps to protect its citizens from the effects of environmental degradation to the extent that it can.

Conclusion

Constitutionalism can play an important role in advancing climate justice. A handful of countries address climate change expressly into their constitutions and a growing number of courts — led by those in Pakistan, the Netherlands, and the United States — have recognized that governmental action or failure to act on climate change can abridge a right to a healthy climate as implied by an express constitutional right to life, dignity or due process, or an emerging right to a healthy environment.



JUDICIAL ENGAGEMENT OF ENVIRONMENTAL CONSTITUTIONALISM

Jurists play an essential role in analyzing and contextualizing environmental constitutionalism's emerging influence. This corresponds with a worldwide growth in independent judiciaries, or at least courts that have jurisdiction to hear constitutional questions and advance new constitutional rights and remedies. With more courts engaging in constitutional review, and issuing more opinions, the import of comparative constitutionalism grows. For instance, while Israel, South Africa, Pakistan and Colombia have radically different histories, each has constitutional courts addressing the multivariate challenges of balancing public and private power, of interpreting entrenched constitutional texts, and of maintaining institutional legitimacy while ensuring, the progressive development of rights.

As the societies around the world evolve at an ever-faster rate, courts are increasingly faced with problems of first impression, problems that are answerable less by recourse to each country's own history and constitutional origins than to contemporary experience and reason. A single nation's own past practice is unlikely to guide a court's judgment with regard to diminishing privacy, or the threat of terrorism, or, especially to the challenges of environmental degradation and climate change.

These challenges must be answered by reference to the best practices among nations. Comparing and contrasting among jurists "expands judicial thinking" and reveals "false necessities." Nowadays, it is widely accepted that comparative constitutionalism contributes to the development of a body of best practices. Because the law takes into account judicial reasoning, it is important to know what sources influenced or inspired the judge; whether she borrowed from foreign or international sources or relied exclusively on domestic experience determines how the opinion is interpreted and applied in later cases and affects its expressive significance. It is, for that reason, especially important for the court to understand the nature and the character of the foreign or international source. The borrowing jurist must pay particular attention to the reasoning of the foreign opinion to ensure that she is appropriating it fairly and accurately. By contrast, when scholars survey global jurisprudence, the very fact that a judicial opinion has construed a constitutional environmental provision or applied it in a particular way is itself worthy of note, whether or not the reasoning is particularly persuasive.

While comparative constitutionalism is an effective means for evaluating the emergence of global environmental constitutionalism, it is not without its limitations. First, because the jurisprudence is global, describing and respecting the integrity of localization can be challenging. Although most countries adhere to international declarations and conventions affirming their commitment to environmental protection, one country might do so by treating environmental protection as a public good, while another might prefer to use the revenues produced from private exploitation of natural resources for education or social security. These are complex policy choices that are best made at the national level by institutions that are operating within the local society, familiar with local conditions, and accountable within the local political climate. And courts, more than the tribunals and commissions

that operate regionally and internationally, are more accessible to the local population and

more able to effectively enforce their orders against local officials.

Localization of environmental protection is particularly important for several additional reasons, too. It is undoubtedly true that although some environmental problems transcend national borders, most are rooted in local spaces, whether a bay, a forest, or a particular part of a mountaintop. And the manifestations of environmental degradation are experienced by the local residents, as loss of access to nature, deterioration of health, and so on. Likewise, the solutions are most likely to be implemented locally. Responsibility for the choices made must be taken by actors who are politically accountable.

The ability to implement environmental values in a local context also helps to avoid some of the most contentious charges made against international environmental law, namely those embodied in claims of western hegemony and cultural imperialism. Judiciaries in countries that resist the global environmental ethos can move more slowly or not at all, while others can push the boundaries of international law into new and unchartered territories, as, for instance, Ecuador and Bolivia have done in protecting the rights of nature, and as countries in Southeast Asia have done in explicitly encouraging environmental rights litigation and in tying environmental protection to the protection of life and human dignity.

But while the situs of environmental issues are ordinarily contextually specific, their implications are transcendent, involving almost all aspects of life. National courts, like international summits, have recognized that pollution can affect individual and social health: lack of water can diminish girls' opportunities to attend school; climate change can produce environmental refugees; irresponsible exploitation of natural resources can devastate entire cultures; and, as the water wars of the 1990s in Bolivia suggest, failure to balance environmental and human needs can even threaten rule of law and democratic governance.

The challenges inherent in any comparative approach have particular salience with regard to emerging and what can be evanescent ideals like environmental protection. For example, because the legal boundaries of environmental protection are often not well defined, courts engaging constitutional claims may find themselves not only defining the scope of legally enforceable rights but also propounding social values. Values, more than rights, may inform public discourse and infiltrate social consciousness that, in turn, can help to change the behavior of both public and private actors. A court that persistently emphasizes the importance of sustainability and of maintaining a balance with nature will help to inculcate environmental values into the culture: people will demand that public officials act in ways that respect nature, and will do so not only through litigation but in all forms of political discourse and even private activity. As a result, judicial articulation of environmental values may be as instrumental in promoting environmental protection as the legal pronouncements on the scope of the rights asserted.

Comparing the constitutional environmental jurisprudence of countries around the world yields insights into the ways different legal cultures have responded to similar problems. The panoply of cases included in these materials illustrates the profound commitment to environmental protection that some courts have shown, and the inexhaustible creativity that they have evidenced in trying to resolve complex, polycentric problems that implicate

these diverse interests. Through the comparative project, we can see how, by borrowing and learning from one another, courts are developing a rich and varied set of responses to the challenges of environmental protection through the means of environmental constitutionalism.

We emphasize decisions issued by with constitutional authority to interpret constitutional text; and, with few exceptions, we have not analyzed decisions by lower courts in most countries, nor to green courts or other specialized tribunals because these decisions are less accessible in a medium that can be cite-verified, they are subject to subsequent revision by apex courts, and they are less likely to have a social impact that is as profound. And because we are most interested in the constitutional dimensions of domestic environmental rights, we have not generally considered decisions involving common or civil law environmental issues, nor on the decisions of regional bodies, such as the African Commission on Human and People's Rights, the Inter-American Commission on Human Rights, or the European Court of Human Rights, except to the extent they engage environmental constitutionalism.

Other limitations of comparative constitutionalism are epistemic. Most constitutions lack a constitutional record that might help to explain what the framers of a provision had in mind. Only rarely does one gain a glimpse into the machinations of constitutional reform.

Moreover, a constant of environmental constitutionalism is how quickly it changes. Indeed, in the last decade alone, more than a dozen countries have adopted or substantially modified substantive environmental rights provisions in their constitutions, including Armenia, Bolivia, Ecuador, Egypt, Dominican Republic, Fiji, France, Guinea, Hungary, Jamaica, Kenya, Maldives, Madagascar, Montenegro, Morocco, Myanmar, Nepal, Rwanda, Serbia, South Sudan, Sri Lanka, Sudan, Tunisia and Turkmenistan. And with a 17-year shelf life for the average constitution, environmental constitutionalism is a moving target.

While these materials detail what jurists decide, within do not presume to explicate what each judicial decision can mean in a particular political and cultural context or the social implications of each case, nor whether or not a particular case has resonated throughout society or become an icon of the potential for judicial engagement (for good or ill). Nor as a general matter do we presume to analyze the political ramifications and sequelae of each case: how was it received? Was it implemented? Has the river or forest or mountaintop returned to a pristine state? Because of the fragility of the environment and the enormous forces that militate against protection (development, population growth, conflict, culture, corruption or greed, and so on), it is likely that the environmental interest that is protected in a given case may not remain protected for long. Depending on location, circumstances, timing and other factors, a judicial pronouncement can contain powerful, showy but unenforceable prose that ultimately advances the human condition in unremarkable ways, if at all. On the other hand, some judicial opinions that appear to advance justice only parochially or incrementally can ultimately harbor emerging rights for present and future generations.

In fact, courts can hardly on their own cause wholesale transformation of domestic environmental policy. In most countries, constitutional and apex courts have spoken seldom if at all about environmental constitutionalism. And yet, it is our contention that even these sporadic assertions are important because they are indicative of a growing worldwide awareness of the potential of environmental constitutionalism. The mere fact

that courts are focusing on the constitutional dimensions of environmental issues makes it more likely that environmental awareness will seep into the cultural consciousness for present and future generations.

