ENVIRONMENTAL RULE OF LAW

First Global Report





Justice Swatanter Kumar (Retd.) Former Judge, Supreme Court of India Former Chairperson, National Green Tribunal

In Ancient Indian Philosophy, the concept of Vasudev Kutumbakam, a Sanskrit phrase meaning "the world is one family", finds frequent mentions and the concept of Environmental Rule of Law, as has been ardently brought forth in the report, can be traced to this ancient concept. Natural resources should be treated as global assets as juxtaposed with national property. Environment is a universal subject and environmental rule of law demands making the right to clean and decent environment fundamental to human existence, efficacious and expeditious across the globe.

The report individuates the governance system of various countries and simultaneously presses upon the conditional differences in various aspects of Environmental Management. The four pillars of sustainable development- economic, social, environmental and peaceis a well-placed need of the hour. The melancholic undertones of the reality must not overcome the various strides that we as populace of the world are taking towards becoming environmentally aware and developing our consciousness and conscience and towards this cause. It is this light of this advancement and strengthening that this report becomes extremely relevant in today's times.

I would like to congratulate the UN Environment for coming out with comprehensive and informative "Environmental Rule of Law- First Global Report" and wish them success.

Emmanuel Ugirashebuja, East African Court of Justice

"When everything else has been tested and yielded limited success, perhaps the only remaining much needed hope for salvaging the environment can only be found in espousing the concept of environmental rule of law especially in developing countries where consequences of environmental degradation are catastrophic."

Lord Carnwath

"I very much welcome the publication of this authoritative and comprehensive report. The Environmental Rule of Law is now an established concept. There is an urgent need for it to be applied in a practical and effective way by courts and administrators throughout the world. This report will make a valuable contribution."

Terry Tamminen, President and CEO of the Leonardo DiCaprio Foundation

"The rule of law means that no one is above the law. This new report on the Environmental Rule of Law will help us improve compliance with environmental law, which is essential to ensuring protection of constitutional and human rights. As a U.N. Messenger of Peace, Mr. DiCaprio particularly supports legal protection of environmental defenders, especially indigenous peoples. During 2016, more than 200 environmental defenders were killed in 24 countries, with intimidation and violence affecting many more; a significant number of these were indigenous peoples."

"Many species' survival rests upon the success of environmental rule of law, which is why an increasing number of countries are extending legal rights or legal personhood to natural systems. As the United Nations has observed, living by the rule of law is critical to peace. It is a pre-requisite to the realization of all human rights."

David Boyd, Special Rapporteur on Human Rights and the Environment

"This compelling new report solves the mystery of why problems such as pollution, declining biodiversity and climate change persist despite the proliferation of environmental laws in recent decades. Unless the environmental rule of law is strengthened, even seemingly rigorous rules are destined to fail and the fundamental human right to a healthy environment will go unfulfilled."

Acknowledgments

This report was drafted by Carl Bruch, Scott Schang, John Pendergrass, Scott Fulton, Nora Moraga-Lewy, Merideth Wright, and Greta Swanson of the Environmental Law Institute, under the direction of Arnold Kreilhuber, Elizabeth Mrema, Angela Kariuki, Allan Meso, and Lara Ognibene of the United Nations Environment Programme (UN Environment).

Research, drafting, design, and production support was provided by Sonia Ahmad, Naysa Ahuja, Azi Akpan, Leigh Barton, Mary Becker, Ethan Blumenthal, Aletta Brady, Isabel Carey, Lester Carver, Thien Chau, Serena Choi, Charlotte Collins, Kelsey Condon, Erin Daly, Gary Dresdin, Scott Drinkall, Davonne Flanagan, Talia Fox, Amalia Fuentes, Octavio Goio, John Hare-Grogg, Elana Harrison, Nafiseh Jafarzadeh, Carol Jones, Sierra Killian, Marcella Kim, Sam Koenig, Qiying Kuang, Michael Lerner, Charles Mack, James May, Kate McCormick, Emmett McKinney, Kathleen McLean, Caitlin Meagher, Mark Mlella, Kaly Moot, Isabelle Morley, Iris Moriyama, Laura Muse, Ashley Phillips, Lovinia Reynolds, Caroline Schiavo, Ambereen Shaffie, Lydia Slobodian, Kim Smaczniak, Samuel Smith, Taheer Tajani, Jessica Troell, Scott Vaughn, Jessye Waxman, Edith Brown Weiss, Sarah Wright, and Alda Yuan.

In addition to reviews by staff at UN Environment, the report benefitted from review and comments from David Boyd, Loretta Feris, Dan Magraw, Tianbao Qin, Charlotta von Troil, and several other governmental and nongovernmental reviewers. The views expressed in the final Report represent those of UN Environment, and do not necessarily reflect those of the reviewers.

Except as otherwise specifically noted, the maps in this publication use public domain data originating from Map of World with Countries - Outline by FreeVectorMaps.com. Borders were updated to reflect countries as of the date specified in each map title or description. The designations employed and the presentations do not imply the expressions of any opinion whatsoever on the part of UN Environment or contributory organizations concerning the legal status of any country, territory, city or area or its authority, or concerning the delimitation of its frontiers or boundaries.

When available, URLs are provided for sources that can be accessed electronically. URLs contained in this book were current at the time of publication.

Copyright © United Nations Environment Programme, 2019

This publication may be reproduced in whole or in part and in any form for educational and non-profit purposes without special permission from the copyright holder, provided that acknowledgement of the source is made. UN Environment will appreciate receiving a copy of any publication that uses this material as a source. No use of this publication can be made for the resale or for any other commercial purpose whatsoever without the prior permission in writing of UN Environment.

The use of information from this document for publicity of advertising is not permitted.

Mention of a commercial company or product in this document does not imply endorsement by UN Environment. Trademark names and symbols are used in an editorial fashion with no intention or infringement on trademark or copyright laws.

Environmental Rule of Law First Global Report

Table of Contents

Foreword	
Executive Summary	viii
1. Introduction	1
1.1 Overview	1
1.2 Benefits of Environmental Rule of Law	17
1.3 Core Elements of Environmental Rule of Law	
1.4 Evolution of Environmental Rule of Law	26
1.5 Understanding and Addressing the Drivers of Environmental Compliance and	
Non-Compliance	
1.6 Conclusion	33
2. Institutions	35
2.1 Introduction	35
2.2 Clear and Appropriate Mandates	45
2.3Coordination	49
2.4 Capacity Development	
2.5 Information Collection, Management, and Use	63
2.6 Investigation and Enforcement	70
2.7 Environmental Auditing and Institutional Review Mechanisms	75
2.8 Leadership	78
2.9 Opportunities and Recommendations	85
3. Civic Engagement	87
3.1 Introduction	87
3.2 Access to Information	98
3.3 Public Participation	
3.4 Opportunities and Recommendations	
4. Rights	137
4.1 Introduction	137
4.2 Right to a Healthy Environment	
4.3 Right to Nondiscrimination and Rights of Marginalized Populations	
4.4 Rights of Free Association, Free Expression, and Freedom of Assembly	
4.5 Opportunities and Recommendations	180

5. Justice	183
5.1 Introduction	
5.2 Access to Justice	
5.3 Adjudications	
5.4 Effective Remedies	213
5.5 Opportunities and Recommendations	222
6. Future Directions	225
6.1 Environmental Rule of Law and the Sustainable Development Goals	226
6.2 Engaging Diverse Actors	229
6.3 Regular Assessment of Environmental Rule of Law	234
6.4 Pilot Testing of Approaches	237
6.5 Way Forward	240
Annex I: References Cited	243
Chapter 1 (Introduction)	243
Chapter 2 (Institutions)	249
Chapter 3 (Civic Engagement)	257
Chapter 4 (Rights)	264
Chapter 5 (Justice)	271
Chapter 6 (Future Directions)	276
Annex II: International Instruments	
Annex III: Indices and Data Sources	282

Foreword

It's clear that without environmental rule of law, development cannot be sustainable. Rule of law ensures that well-designed safeguards are just that: a pillar of protection for people and planet that are the very foundation of life itself. Environmental rule of law is also a barometer for the health of government institutions that are held accountable by an informed and engaged public; in other words, of a culture of sound environmental and social values.

A clear example of its importance is Costa Rica, a nation heavily dependent on natural resources and situated in a wider region that has been too often ravaged by political strife. The country has increased life expectancy to more than 79 years, achieved 96 percent adult literacy, and built per capita income to almost US\$9,000 while setting and meeting ambitious environmental goals. Moreover, it has already doubled its forest cover to over 50 percent and is on track to be climate neutral by 2021.



It's an illustration of how setting, implementing, and enforcing clear planetary boundaries is not a straitjacket, but rather a driver of innovation and health. Environmental rule of law provides agencies with the authority to act. It provides citizens with clear pathways to justice and sets a fair framework for businesses to behave sustainably.

As a result, governments are now using rights-based approaches to help meet environmental commitments and reinforce the importance of environmental law. In Nepal, for instance, citizens and non-governmental organizations made an application to Nepal's Supreme Court against a marble factory on the basis that it caused environmental degradation to the Godavari forest and its surroundings. The factory emitted dust, minerals, smoke, and sands and had polluted the water, land, and air of the area, endangering the lives and property of the local people. The Court held that Nepal's constitutional provision protecting the right to life necessarily included the right to a clean and healthy environment. It's an obvious connection – but one that is sadly often overlooked. The Court ultimately issued directives to the Parliament to pass legislation to protect the Godavari environment; that is, its air, water and people.

These kinds of rulings show that environmental protection is in the public interest and has solid legal grounding. By publishing the first global report on environmental rule of law, we hope to highlight the work of those standing on the right side of history – and how many nations are stronger and safer as a result.

Joyce Myusa Acting Executive Director, UN Environment

Executive Summary

If human society is to stay within the bounds of critical ecological thresholds, it is imperative that environmental laws are widely understood, respected, and enforced and the benefits of environmental protection are enjoyed by people and the planet. Environmental rule of law offers a framework for addressing the gap between environmental laws on the books and in practice and is key to achieving the Sustainable Development Goals.

Environmental laws have grown dramatically over the last three decades, as countries have come to understand the vital linkages between environment, economic growth, public health, social cohesion, and security. As of 2017, 176 countries have environmental framework laws; 150 countries have enshrined environmental protection or the right to a healthy environment in their constitutions; and 164 countries have created cabinet-level bodies responsible for environmental protection. These and other environmental laws, rights, and institutions have helped to slow—and in some cases to reverse—environmental degradation and to achieve the public health, economic, social, and human rights benefits that accompany environmental protection.

The 1972 United Nations Conference on the Human Environment brought the global environment into the public consciousness, leading to the establishment of the United Nations Environment Programme. Following the 1992 United Nations Conference on Environment and Development (known as the Rio Earth Summit), many countries made a concerted effort to enact environmental laws, establish environment ministries and agencies, and enshrine environmental rights and protections in their national constitutions. By the 2012 United Nations Conference on Sustainable Development, the focus had shifted to implementation of environmental laws, which is where progress has waned.

Too often, implementation and enforcement of environmental laws and regulations falls far short of what is required to address environmental challenges. Laws sometimes lack clear standards or necessary mandates. Others are not tailored to national and local contexts and so fail to address the conditions on the ground. Implementing ministries are often underfunded and politically weak in comparison to ministries responsible for economic or natural resource development. And while many countries are endeavouring to strengthen implementation of environmental law, a backlash has also occurred as environmental defenders are killed and funding for civil society restricted. These shortfalls are by no means limited to developing nations: reviews of developed nations have found their performance on environmental issues lacking in certain respects. In short, environmental rule of law is a challenge for all countries. This Report discusses the range of measures that countries are adopting to address this implementation gap—and to ensure that rule of law is effective in the environmental sphere.

As the first assessment of the global environmental rule of law, this Report draws on experiences, challenges, viewpoints, and successes of diverse countries around the world, highlighting global trends as well as opportunities for countries and partners to strengthen the environmental rule of law.

The Report highlights the need to undertake a regular global assessment of the state of environmental rule of law. To track progress nationally and globally, it is necessary to utilize a set of consistent indicators. The Report proposes an indicator framework for environmental rule of law and highlights existing datasets that may be utilized in support of the global assessment.

The Report also calls for a concerted effort to support countries in pilot testing approaches to strengthen environmental rule of law. Such an initiative could support testing of approaches in diverse contexts, and then adapting them before scaling them up. It should also foster exchange of experiences between jurisdictions to foster learning.

In addition to these two cross-cutting recommendations, the Report highlights numerous actionable steps that States can take to support environmental rule of law. For example, States can evaluate the current mandates and structure of environmental institutions to identify regulatory overlap or underlap. States and partners can build the capacity of the public to engage thoughtfully and meaningfully with government and project proponents. They can prioritize protection of environmental courts and tribunals, and use administrative enforcement processes to handle minor offenses. And there is an ongoing need to research which approaches are effective under what circumstances.

The benefits of environmental rule of law extend far beyond the environmental sector. While the most direct effects are in protection of the environment, it also strengthens rule of law more broadly, supports sustainable economic and social development, protects public health, contributes to peace and security by avoiding and defusing conflict, and protects human and constitutional rights. As such, it is a growing priority for all countries.

موجز تنفيذي

إذا أراد المجتمع البشري أن يظل ضمن حدود العتبات البيئية الحرجة، فمن الضروري للغاية أن تُفهم القوانين البيئية على نطاق واسع، وتحترم وتنفذ، وأن يتمتع الكوكب وسكانه من البشر بمزايا الحماية البيئية. وتتيح سيادة القانون البيئي إطاراً لمعالجة الفجوة بين القوانين البيئة المسجلة والمتبعة بالممارسة، وتمثل عنصراً أساسياً لتحقيق أهداف التنمية المستدامة.

وخلال العقود الثلاثة الماضية، ازدادت القوانين البيئية ازدياداً كبيراً، مع نمو فهم البلدان للروابط الحيوية بين البيئة والنمو الاقتصادي، والصحة العامة، والتماسك الاجتماعي، والأمن. وحتى العام ٢٠١٧، سُنَّت القوانين الإطارية البيئية في ١٧٦ بلداً؛ وكرس ١٥٠ بلداً حماية البيئة أو الحق في بيئة صحية في دساتيرها؛ وأنشأ ١٦٤ بلداً هيئات على المستوى الوزاري لتولي مسؤولية حماية البيئية. وقد ساعدت هذه القوانين والحقوق والمؤسسات البيئية في إبطاء التدهور البيئي - وعكس اتجاهه في بعض الحالات - وفي تحقيق المنافع التي تصاحب الحماية البيئية في المجالات الاقتصادية والاجتماعية وكذلك للصحة العامة وحقوق الإنسان.

وقدم مؤتمر الأمم المتحدة المعني بالبيئة البشرية، الذي عقد في عام ١٩٧٢، مسألة البيئة العالمية إلى الوعي العام، مما أدى إلى إنشاء برنامج الأمم المتحدة للبيئة. وعقب مؤتمر الأمم المتحدة المعني بالبيئة والتنمية لعام ١٩٩٢ (المعروف باسم قمة الأرض في ريو)، بذلت كثير من البلدان جهوداً متضافرة لسن القوانين البيئية، وإنشاء وزارات البيئة والوكالات المعنية بها، وتكريس الحقوق وإجراءات الحماية البيئية في دساتيرها الوطنية. ومع انعقاد مؤتمر الأمم المتحدة للتنمية المستدامة للعام ٢٠١٢، تحول التركيز إلى تنفيذ القوانين البيئية، وهم مجال تضاء التقدم فيه.

وفي كثير من الأحيان، لا يفي تنفيذ القوانين والأنظمة البيئية وإنفاذها بما هو مطلوب للتصدي للتحديات البيئية. وتفتقر القوانين في بعض الحالات إلى المعايير الواضحة أو الولايات اللازمة. في حين أن بعضها الآخر لا يناسب السياقات الوطنية والمحلية، ويخفق بالتالي في التصدي للحالات التي تنشأ على أرض الواقع. وكثيراً ما تعاني الوزارات المنفذة من نقص التمويل، ومن ضعفها سياسياً بالمقارنة مع الوزارات المسؤولة عن التنمية الاقتصادية أو الموارد الطبيعية. وعلى الرغم من المساعي الدؤوبة التي يبذلها كثير من البلدان لتعزيز تنفيذ القانون البيئي، ظهرت ردود أفعال عكسية أيضاً باغتيال المدافعين عن البيئة وتقييد التمويل للمجتمع المدني. ولا تقتصر جوانب العجز هذه على الدول النامية وحدها: فقد أظهرت الاستعراضات التي أجريت في الدول المتقدمة النمو قصوراً في بعض جوانب أدائها المتعلق البيئي. وباختصار، تمثل سيادة القانون البيئي تحدياً لجميع البلدان. ويبحث هذا التقرير طائفة التدابير التي تعتمدها البلدان في التنفيذ - ولكفالة فعالية سيادة القانون في المعال البيئي.

ويستند هذا التقرير، باعتباره التقييم الأول لسيادة القانون البيئي العالمي، إلى الخبرات والتحديات والآراء والنجاحات من بلدان مختلفة في جميع أنحاء العالم، مع تسليط الضوء على الاتجاهات العالمية، وكذلك على الفرص المتاحة للبلدان والشركاء من أجل تعزيز سيادة القانون البيئي.

ويبرز التقرير ضرورة إجراء تقييم عالمي منتظم لحالة سيادة القانون البيئي. ولتتبع التقدم المحرز على الصعيدين الوطني والعالمي، من الضروري استخدام مجموعة متسقة من المؤشرات. ويقترح التقرير إطاراً للمؤشرات المتعلقة بسيادة القانون البيئي، ويسلط الضوء على مجموعات البيانات القائمة التي يمكن أن تستخدم في دعم التقييم العالمي.

ويدعو التقرير أيضاً إلى بذل جهود متضافرة من أجل دعم البلدان في الاختبار التجريبي للنُهُج الرامية إلى تعزيز سيادة القانون البيئي. ومن شأن هذه المبادرة أن تدعم اختبار النُهُج في سياقات متنوعة، ثم تكييفها قبل توسيع نطاقها. وينبغي أن تشجع أيضاً تبادل الخبرات بين الولايات القضائية لتعزيز التعلم.

وبالإضافة إلى هاتين التوصيتين الشاملتين، يسلط التقرير الضوء على العديد من الخطوات العملية التي يمكن أن تتخذها الدول من أجل دعم سيادة القانون البيئي. فعلى سبيل المثال، يمكن للدول أن تقيم الولايات الحالية للمؤسسات البيئية وهياكلها لتحديد حالات التداخل التنظيمية الكلية أو الجزئية. ويمكن للدول أو الجهات الشريكة أن تبني قدرات الجمهور على المشاركة المتأنية والهادفة مع الحكومة ومقترحي المشاريع. ويمكنها أن تعطي الأولوية لحماية المدافعين عن البيئة والمبلغين عن المخالفات. وقد تود الدول أن تنظر في إنشاء محاكم بيئية ومحاكم بيئية متخصصة، وفي استخدام عمليات الإنفاذ الإدارية للتعامل مع الجرائم البسيطة. وهناك حاجة مستمرة إلى بحث أي النهج تثبت فعاليتها وما هي الظروف التي تكون فعالة فيها.

وتحقق سيادة القانون البيئي منافع يتجاوز نطاقها القطاع البيئي. وعلى الرغم من أن معظم آثارها المباشرة تتجلى في حماية البيئة، فهي تعزز أيضاً سيادة القانون على نطاق أوسع، وتدعم التنمية الاقتصادية والاجتماعية المستدامة، وتحمي الصحة العامة، وتسهم في تحقيق السلام والأمن عن طريق تجنب ونزع فتيل النزاع، وتحمي حقوق الإنسان والحقوق الدستورية. وهي بذلك تمثل أولوية ذات أهمية متزايدة لجميع البلدان.

执行摘要

人类社会要想不逾越关键的生态临界点,当务之急就是让环境法得到普遍了解、遵守和实施,让人类和 地球享有保护环境的益处。环境法治提供了一个框架,用来解决环境法理论和实践之间的差距问题,是 实现可持续发展目标的关键。

在过去三十年中,随着各国逐渐了解环境、经济增长、公共卫生、社会凝聚力和安全之间的重要联系,环境法取得了长足的发展。到2017年,已有176个国家颁布了环境框架法,有150,有164个国家设立了内阁级环境保护机构。上述举措以及其他环境法律、权利和机构,已帮助减缓、在某些情况下还扭转了环境退化,实现环境保护带来的公共卫生、经济、社会和人权利益。

1972年联合国人类环境会议让公众意识到全球环境问题,使联合国环境规划署得以设立。继1992年联合国环境与发展会议(称为"里约地球问题首脑会议")之后,许多国家一致努力制定环境法,建立环境部委和机构,并将环境权利和保护写入国家宪法。到2012联合国可持续发展会议时,重点已转向环境法的实施,因为这方面的进展有所放缓。

环境法和条例的执行和实施远不足以满足应对环境挑战的要求,这种情况十分常见。法律有时缺乏明确 的标准或必要的规定任务。还有些法律不符合国家和地方的具体情况,从而无法适应当地的条件。与负 责经济或自然资源开发的部委相比,环境法的执行部委往往资金上不足,政治上薄弱。虽然许多国家正 在努力加强环境法的执行,但同时也发生了反弹现象:环境维护者遇害,对民间社会的资助受限。以上不 足绝不仅限于发展中国家;对发达国家的审查表明其在环境问题上的表现在某些方面有所欠缺。总之, 环境法治是所有国家都面临的一项挑战。本报告讨论了一系列措施,各国正在采用这些措施,以解决执 行方面的这种欠缺,并确保法治在环境领域有效运行。

作为对全球环境法治情况的首次评估,本报告参考了世界各国的经验、挑战、观点和成功案例,强调加强 环境法治对各国及合作伙伴而言既是机遇,也是全球大势所趋。

报告强调,需要定期进行全球环境法治状况评估。为了在国家和全球两级跟踪进展情况,就必须采用一套一致的指标。本报告提出了一个环境法治指标框架,强调可利用现有的数据集来支持全球评估。

报告还呼吁作出协调一致的努力,支持各国试行各种加强环境法治的办法。这一举措可支持在不同背景 下测试各种方法,然后先对之进行调整,再扩大应用规模。它还应该能够促进不同法域之间的经验交流, 以促进学习。

除了这两条跨领域建议之外,报告还强调,各国可以采取许多可行的措施,以支持环境法治。例如,各国 可以评估环境机构目前的任务规定和结构,以查明重复监管的情况。各国及合作伙伴可以开展公众能力 建设,使公众能够与政府和项目提议者进行有创见、有意义的接触交流。它们可以将保护环境维护者和 举报人作为优先事项。各国可以考虑设立专门的环境法院和法庭,并利用行政执法程序处理轻罪。目前 还需要研究哪些办法在什么情况下能够奏效。

环境法治的惠及范围远远超出了环境领域。虽然最直接的影响是环境保护,但环境法治还会更加广泛地加强法治,支持可持续的经济和社会发展,保护公众健康,通过避免和化解冲突来促进和平与安全,并保护人权和宪法规定的权利。因此,环境法治对所有国家都是日益重要的优先事项。

Résumé analytique

Pour que la société humaine ne franchisse pas les seuils écologiques critiques, il faut impérativement que les lois environnementales soient connues, respectées et appliquées le plus largement possible et que les bienfaits découlant de la protection de l'environnement profitent à l'ensemble des êtres humains et de la planète. Le principe de primauté du droit en matière environnementale sert à combler l'écart existant entre les différents droits de l'environnement, en théorie comme en pratique, et est essentiel à la réalisation des objectifs de développement durable.

Les différents droits de l'environnement se sont considérablement étoffés au cours des 30 dernières années, les pays comprenant mieux les liens profonds qui unissent l'environnement, la croissance économique, la santé publique, la cohésion sociale et la sécurité. En 2017, 176 pays comptaient une loi-cadre en matière d'environnement ; 150 pays avaient inscrit dans leur constitution la protection de l'environnement ou le droit à un environnement sain ; et 164 pays s'étaient dotés d'organes ministériels chargés de la protection de l'environnement. Ces mécanismes et d'autres lois, droits et institutions en matière d'environnement ont contribué à ralentir et, dans certains cas, à inverser la dégradation de l'environnement et à produire des bienfaits dans les domaines de la santé publique, de l'économie et des droits humains, ainsi qu'en matière sociale, qui découlent de la protection de l'environnement.

La Conférence des Nations Unies sur l'environnement de 1972 a permis de porter à l'attention du public la question de l'environnement mondial, ce qui a conduit à la création du Programme des Nations Unies pour l'environnement. Au lendemain de la Conférence des Nations Unies sur l'environnement et le développement de 1992 (également connue sous le nom de Sommet de la Terre de Rio), de nombreux pays ont mené une action concertée afin d'adopter des lois environnementales, de créer des ministères et des organes chargés des questions environnementales et d'inscrire dans leur constitution des droits environnementaux et la protection de l'environnement. Au moment où s'est tenue la Conférence des Nations Unies sur l'environnement et le développement de 2012, la priorité avait changé et il s'agissait alors d'assurer la mise en œuvre des lois environnementales, laquelle régressait.

Trop souvent, l'application et le respect des lois et des règlements en matière d'environnement sont loin d'être à la hauteur de ce qu'il faudrait faire pour remédier aux problèmes écologiques. Certaines lois ne sont pas accompagnées de normes précises ou des mandats nécessaires. D'autres ne sont pas adaptées aux contextes nationaux et locaux et, partant, ne peuvent répondre aux besoins engendrés pas les conditions sur le terrain. Les ministères chargés de l'application des lois environnementales manquent souvent de fonds et de force politique par rapport à ceux chargés du développement économique ou de l'exploitation des ressources naturelles. De plus, bien que de nombreux pays s'efforcent aujourd'hui de renforcer l'application des lois environnementales, on assiste parallèlement à un recul : des défenseur(euse)s de l'environnement sont assassinés, les fonds alloués aux organisations de la société civile sont restreints, etc. Ce constat ne s'applique absolument pas qu'aux pays en développement.

En effet, l'examen des résultats obtenus en matière d'environnement par les pays développés révèle des lacunes sur certains points. Pour résumer, la primauté du droit environnemental constitue un défi pour tous les pays. Le présent rapport se penche sur l'ensemble des mesures que les pays adoptent actuellement pour régler le problème de l'application des lois et faire en sorte que la primauté du droit soit effectivement respectée dans le domaine environnemental.

S'agissant de la première évaluation mondiale de la primauté du droit environnemental, le présent rapport s'appuie sur les enseignements tirés et les difficultés rencontrées par divers pays dans le monde, ainsi que sur leurs opinions et leurs réussites, et met en évidence les

tendances mondiales et les créneaux qui permettraient aux pays et aux partenaires de renforcer la primauté du droit environnemental.

Le rapport montre qu'il faut évaluer régulièrement la situation mondiale de la primauté du droit en matière environnementale. Pour suivre les progrès réalisés aux échelles nationale et mondiale, il importe d'utiliser un ensemble d'indicateurs constants. Le rapport propose un cadre d'indicateurs permettant d'évaluer la primauté du droit en matière environnementale et renvoie aux séries de données existantes qui pourraient faciliter l'évaluation mondiale.

Le rapport préconise également un effort concerté afin d'aider les pays à mettre à l'essai les méthodes visant à renforcer la primauté du droit en matière environnementale. Une telle initiative pourrait faciliter la mise à l'essai des méthodes dans divers contextes et leur ajustement avant leur transposition à une plus grande échelle. Elle devrait également encourager les juridictions à échanger leurs expériences afin de favoriser l'apprentissage.

Outre ces deux recommandations générales, le rapport met en avant de nombreuses mesures concrètes que les États peuvent prendre en faveur de la primauté du droit en matière environnementale. Par exemple, les États peuvent évaluer les structures et mandats des institutions environnementales afin de faire apparaître les doublons ou les lacunes réglementaires. Les États et les partenaires peuvent renforcer les moyens que le public a à sa disposition pour dialoguer de manière réfléchie et sérieuse avec les pouvoirs publics et les promoteurs de projets. Ils peuvent également faire de la protection des défenseur(euse) s de l'environnement et des lanceur(euse)s d'alerte leur priorité. Les États peuvent envisager de créer des juridictions spécialisées en matière d'environnement et de traiter les infractions mineures par le biais de procédures administratives. Par ailleurs, il reste nécessaire de déterminer quelles méthodes sont efficaces selon les circonstances.

Les bienfaits découlant de la primauté du droit en matière environnementale dépassent largement le secteur environnemental. Bien que la protection de l'environnement profite le plus directement de la primauté du droit en matière environnementale, cette dernière renforce également la primauté du droit de manière générale, favorise un développement économique et social durable, protège la santé publique, contribue à la paix et à la sécurité en évitant et en désamorçant les conflits et protège les droits humains et constitutionnels. Elle constitue donc une priorité de plus en plus grande pour tous les pays.

Краткое изложение

Для того, чтобы человечество не превысило пределы критических пороговых значений для окружающей среды, крайне важно добиваться широкого осознания природоохранных законов, их уважения и применения и чтобы положительные результаты природоохранной деятельности служили на благо людей и планеты. Верховенство природоохранного права является основой для устранения несоответствия между содержанием природоохранных законов и их применением на практике и имеет ключевое значение для достижения целей в области устойчивого развития.

За последние три десятилетия объем природоохранного законодательства значительно увеличился по мере того, как страны пришли к пониманию жизненно важных связей между окружающей средой, экономическим ростом, состоянием здоровья населения, социальной сплоченностью и безопасностью. По состоянию на 2017 год основы природоохранного законодательства имеются в 176 странах; в 150 странах положения об охране окружающей среды или о праве на здоровую окружающую среду закреплены в конституциях; в 164 странах на уровне общенациональных органов исполнительной власти созданы органы, ответственные за охрану окружающей среды. Эти и другие природоохранные законы, права и институты помогли замедлить – а в некоторых случаях и обратить вспять – ухудшение состояния окружающей среды и добиться обусловленных охраной окружающей среды положительных результатов для здоровья населения, в экономической, социальной сферах и в области прав человека.

В 1972 году на Конференции Организации Объединенных Наций по проблемам окружающей человека среды внимание общественности было привлечено к вопросам глобальной окружающей среды, что привело к созданию Программы Организации Объединенных Наций по окружающей среде. После Конференции Организации Объединенных Наций по окружающей среде и развитию 1992 года (известной как Встреча на высшем уровне «Планета Земля») в Рио-де-Жанейро многие страны предприняли согласованные усилия для принятия природоохранных законов, создания министерств и ведомств, занимающихся вопросами окружающей среды, и закрепления положений об экологических правах и охране окружающей среды в конституциях своих стран. Ко времени проведения Конференции Организации Объединенных Наций по устойчивому развитию в 2012 году акцент сместился на применение природоохранных законов, поскольку именно в этой сфере произошел спад.

Во многих случаях соблюдение и обеспечение выполнения природоохранных законов и нормативных актов не отвечает потребностям решения экологических проблем. В законодательстве могут не предусматриваться четкие стандарты или необходимые полномочия. В нем могут не учитываться национальные и местные условия и, по этой причине, не приниматься во внимание фактические обстоятельства. Министерства исполнители часто не располагают достаточными финансовыми средствами и обладают меньшей политической властью по сравнению с министерствами, отвечающими за экономическое развитие или освоение природных ресурсов. И хотя многие страны стремятся к укреплению применения природоохранного законодательства, имеет место и обратная реакция: убийство защитников окружающей среды и сокращение финансирования организаций гражданского общества. Эти недостатки характерны не только для развивающихся стран: изучение положения дел в развитых странах выявило неудовлетворительные результаты их деятельности по вопросам окружающей среды в определенных аспектах. Одним словом, обеспечение верховенства природоохранного права является трудной задачей для всех стран. В настоящем докладе рассматривается ряд мер, принимаемых странами для устранения этих различий в применении и для обеспечения эффективности верховенства права в экологической сфере.

Являясь первой оценкой по вопросам верховенства природоохранного права в глобальном масштабе, настоящий доклад подготовлен с учетом опыта, проблем, мнений и достижений различных стран по всему миру, и в нем освещаются глобальные тенденции, а также возможности для стран и партнеров в деле укрепления верховенства природоохранного права.

В докладе подчеркивается необходимость проведения регулярной глобальной оценки положения дел в области верховенства права окружающей среды. Для отслеживания прогресса на национальном и глобальном уровнях необходимо использовать набор единообразных показателей. В докладе предлагается система показателей в отношении верховенства природоохранного права и освещаются существующие наборы данных, которые могут использоваться в поддержку глобальной оценки.

В докладе также содержится призыв к согласованным усилиям по оказанию странам поддержки в экспериментальной проверке подходов к укреплению верховенства природоохранного права. Такая инициатива может обеспечить поддержку проверке подходов в различных условиях, а затем их адаптации с их последующим широкомасштабным применением. Она должна также способствовать обмену опытом между правовыми системами в целях содействия обучению.

Помимо этих двух рекомендаций общего характера в докладе освещаются многочисленные практические шаги, которые государства могут предпринять в поддержку верховенства природоохранного права. Например, государства могут провести оценку существующей сферы полномочий и структуры учреждений, занимающихся вопросами окружающей среды, для выявления случаев дублирования или пробелов в нормативно-правовой сфере. Государства и партнеры могут укрепить потенциал общественности для продуманного и конструктивного взаимодействия с правительством и инициаторами проектов. Они могут уделить первоочередное внимание защите активистов в области охраны окружающей среды и разоблачителей нарушений. Государства могут рассмотреть возможность создания судебных органов, специализирующихся на вопросах окружающей среды, и использования административных процессуальных норм в случае незначительных правонарушений. Также сохраняется необходимость изучения вопроса о том, какие подходы эффективны и при каких обстоятельствах.

Положительный эффект от верховенства природоохранного права ощущается не только в экологической сфере. При том, что оно оказывает самое непосредственное влияние на охрану окружающей среды, оно также способствует укреплению верховенства права в более широком смысле, содействует устойчивому экономическому и социальному развитию, обеспечивает охрану здоровья населения, способствует поддержанию мира и безопасности путем предотвращения и урегулирования конфликтов и обеспечивает защиту прав человека и конституционных прав. Таким образом, оно имеет все возрастающее значение для всех стран.

Resumen

Si la sociedad humana quiere mantenerse dentro de los límites de los umbrales ecológicos críticos, es indispensable que comprenda, respete y haga cumplir ampliamente las leyes ambientales, y que las personas y el planeta puedan disfrutar de los beneficios que aporta la protección del medio ambiente. El estado de derecho ambiental ofrece un marco para abordar la disparidad de las leyes ambientales en los libros y en la práctica y es fundamental para lograr los Objetivos de Desarrollo Sostenible.

En los últimos tres decenios el número de leyes ambientales aprobadas ha aumentado significativamente, en la medida en que los países han llegado a comprender los vínculos esenciales entre medio ambiente, crecimiento económico, salud pública, cohesión social y seguridad. A 2017, 176 países contaban con leyes marco en el ámbito del medio ambiente; 150 países habían consagrado la protección del medio ambiente o el derecho a un medio ambiente sano en sus constituciones; y 164 países habían creado órganos a nivel de gobierno encargados de la protección ambiental. Estas y otras leyes, derechos e instituciones ambientales han contribuido a contener –y en algunos casos revertir– la degradación del medio ambiente y a lograr numerosos beneficios en materia de salud pública, desarrollo económico y social y derechos humanos, que se derivan de la protección del medio ambiente.

En 1972, la Conferencia de las Naciones Unidas sobre el Medio Humano concienció a la opinión pública acerca del medio ambiente mundial y ello se tradujo en la creación del Programa de las Naciones Unidas para el Medio Ambiente. Tras la celebración de la Conferencia de las Naciones Unidas sobre el Medio Ambiente y el Desarrollo en 1992 (conocida como la Cumbre para la Tierra, de Río), muchos países desplegaron un esfuerzo concertado para promulgar leyes ambientales, establecer ministerios y organismos de medio ambiente y consagrar los derechos ambientales y la protección del medio ambiente en sus constituciones nacionales. Al momento de celebrarse la Conferencia de las Naciones Unidas sobre el Desarrollo Sostenible en 2012, el centro de la atención se había desplazado a la aplicación de las leyes ambientales, aspecto en el que se habían logrado menos progresos.

Con demasiada frecuencia, la aplicación y el cumplimiento de las leyes y los reglamentos en materia de medio ambiente no están al nivel que se necesita para hacer frente a los problemas ambientales. En ocasiones, las leyes adolecen de normas claras o mandatos necesarios. Otras no están adaptadas a los contextos nacionales y locales y, por lo tanto, no abordan las condiciones sobre el terreno. Por lo general, los ministerios encargados de la ejecución carecen de la financiación necesaria y no tienen la misma influencia política que los ministerios que tienen a su cargo el desarrollo económico o de los recursos naturales. Y, si bien muchos países se están comprometiendo a fortalecer la aplicación del derecho ambiental, también se ha producido un retroceso como resultado del asesinato de defensores del medio ambiente y de la restricción de la financiación para la sociedad civil. Esas deficiencias no se limitan en modo alguno a las naciones en desarrollo: estudios realizados en países desarrollados han indicado que su desempeño en relación con las cuestiones ambientales es deficiente en ciertos aspectos. En resumen, el estado de derecho ambiental es un desafío para todos los países. En el presente informe se analiza la gama de medidas que los países están adoptando para hacer frente a estas deficiencias en la implementación, y para asegurar que el estado de derecho sea eficaz en la esfera del medio ambiente.

Como primera evaluación mundial sobre el estado de derecho ambiental, el presente informe se basa en las experiencias, los retos, puntos de vista y éxitos de los diversos países de todo el mundo, y pone de relieve las tendencias mundiales y las posibilidades de los países y los asociados para fortalecer el estado de derecho ambiental.

En el informe se destaca la necesidad de emprender una evaluación mundial periódica de la situación del estado de derecho ambiental. Para dar seguimiento a los progresos a nivel

nacional y mundial es necesario utilizar un conjunto de indicadores coherentes. En el informe se propone un marco de indicadores en relación con el estado de derecho ambiental y se destacan los conjuntos de datos existentes que pueden utilizarse en apoyo de la evaluación mundial.

En el informe también se alienta la concertación de esfuerzos para ayudar a los países a poner a prueba enfoques dirigidos a fortalecer el estado de derecho ambiental. Esa iniciativa podría apoyar el ensayo de enfoques en diversos contextos para luego adaptarlos antes de ampliarlos a otros niveles. También debería fomentarse el intercambio de experiencias entre las jurisdicciones para promover el aprendizaje.

Además de estas dos recomendaciones intersectoriales, en el informe se destacan las numerosas medidas viables que podrían adoptar los Estados para respaldar el estado de derecho ambiental. Por ejemplo, los Estados pueden evaluar los mandatos actuales y la estructura de las instituciones ambientales para determinar superposiciones o solapamientos en materia de regulación. Los Estados y asociados pueden fomentar la capacidad de la población para participar en debates a fondo y colaborar de manera significativa con los Gobiernos y promotores de proyectos. Pueden dar prioridad a la protección de los defensores ambientales y los denunciantes de irregularidades. Los Estados podrían estudiar la creación de tribunales ambientales especializados y utilizar procesos de ejecución administrativa para enfrentar delitos menores. Hay una necesidad permanente de investigar qué enfoques resultan eficaces en diversas circunstancias.

Los beneficios del estado de derecho ambiental van más allá del sector ambiental. Si bien muchos de sus efectos recaen directamente en la protección del medio ambiente, también fortalecen el estado de derecho, de manera más general, apoyan el desarrollo económico y social sostenible, protegen la salud pública, contribuyen a la paz y la seguridad al evitar y reducir los conflictos, y protegen los derechos humanos y constitucionales. Como tal, es una prioridad creciente para todos los países.



Since the 1972 Stockholm Declaration on the Human Environment, environmental laws and institutions have expanded dramatically across the globe. All countries have at least one environmental law or regulation.¹ Most countries have established and, to varying degrees, empowered environmental ministries. And in many instances, these laws and institutions have helped to slow or reverse environmental degradation.² This progress is accompanied, however, by a growing recognition that a considerable implementation gap has opened—in developed and developing nations alike-between the requirements of environmental laws and their implementation and enforcement. Environmental rule of law—which describes when laws are widely understood, respected, and enforced and the benefits of environmental protection are enjoyed by people and the planet—is key to addressing this implementation gap. This Report reviews countries' experiences building environmental rule of law and identifies the many options available to

better give effect, and force, to environmental law, and thereby advance the attendant public health, environmental, human rights, economic, and social benefits envisioned by environmental laws.

1.1 Overview

Environmental rule of law provides an essential platform underpinning the four pillars of sustainable development economic, social, environmental, and peace.³ Without environmental rule of law, development cannot be sustainable. With environmental rule of law, well-designed laws are implemented by capable government institutions that are held accountable by an informed and engaged public lead to a culture of compliance that embraces environmental and social values.

A shining example of this is Costa Rica, a nation heavily dependent on natural resources

¹ Brown Weiss 2011, 6.

² E.g., Velders et al. 2007; Henderson 1995.

³ The four pillars are enshrined in the 2030 Agenda for Sustainable Development. UNGA 2015.

in a region that has often been ravaged by political strife. The country has increased life expectancy to more than 79 years, achieved 96 percent adult literacy, and built per capita income to almost US\$9,000 while setting and meeting ambitious environmental goals, including already having doubled its forest cover to over 50 percent, and is on track to be climate neutral by 2021.⁴ A study of Costa Rica's dramatic progress toward sustainable development emphasizes the importance of political consensus forged by years of implementing strong environmental controls alongside economic development that resulted in a deep respect for courts and environmental institutions, leading to the emergence and maintenance of environmental rule of law.⁵ The same study notes that erosion of environmental rule of law poses one of the primary threats to Costa Rica's continued success. It finds that "lack of local governance capacity along with the difficulties of coordination between the national and subnational levels" present the biggest obstacle to continued sustainable development.⁶

This introductory chapter reviews how the implementation gap in environmental law came to be, defines environmental rule of law, discusses its benefits, considers how it can be achieved and how it evolved, and reviews the drivers of environmental compliance.

1.1.1 Trends

Environmental law has blossomed from its infancy in the early 1970s into young adulthood today.⁷ Following the 1992 Rio Earth Summit, countries made a concerted effort to enact environmental laws, build environment ministries and agencies, and enshrine environment-related rights and protections in their national constitutions. Figure 1.1 shows the rapid, recent proliferation of framework environmental laws: as of 2017, 176 countries around the world have environmental framework laws that are being implemented by hundreds of agencies and ministries. Many other laws contribute to the body of environmental law, with legal instruments in 187 countries (as of 2017) requiring environmental assessments for projects that impact the environment,⁸ and at least half of the countries of the world having adopted legislation guaranteeing access to information in general or environmental information in particular.⁹ And, since the 1970s, 88 countries have adopted a constitutional right to a healthy environment, with an additional 62 countries enshrining environmental protection in their constitutions in some form—a total of 150 countries from all over the globe with constitutional rights and/or provisions on the environment.¹⁰ While there are still gaps in many of the laws,¹¹ the substantial growth of environmental laws has been a notable achievement.

Simultaneously, there has been a dramatic growth of environmental institutions. As of 2017, 164 countries have created environment ministries or the equivalent (cabinet-level bodies with responsibility over issues explicitly including, but not necessarily limited to, environmental protection). (See Figure 1.2.) Of the remaining countries (countries without environment ministries), 22 have environmental entities with the functional role of independent government agencies and 7 have other entities with responsibility for environmental matters. The latter category includes countries with departments of the environment under ministries with broader

11 Excell and Moses 2017, 30.

⁴ Keller et al. 2013, 82.

⁵ Ibid., 89.

⁶ Ibid., 90.

⁷ Bruch 2006.

^{8 123} countries have stand-alone legal instruments governing environmental impact assessment, and 64 have relevant provisions in other legal instruments. Banisar et al. 2012, 11; *see also* Section 3.3 of this Report. Greenland, a semi-autonomous country, also has a legal framework governing environmental impact assessment.

⁹ Banisar et al. 2012; *see also* Chapter 3 of this Report.

¹⁰ The right to a healthy environment is also enshrined in the Constitution of the State of Palestine. *See* Chapter 4 of this Report.

jurisdictions that do not explicitly include environmental matters as well as entities such as councils or directorates.

While environmental laws have become commonplace across the globe, too often they exist mostly on paper because government implementation and enforcement is irregular, incomplete, and ineffective. In many instances, the laws that have been enacted are lacking in ways that impede effective implementation (for example, by lacking clear standards or the necessary mandates). According to the fifth Global Environmental Outlook, considerable progress has been made toward meeting only 4 of the 90 most important environmental goals and objectives, and critical ecological thresholds upon which human well-being depend may soon be surpassed.¹² Many developing countries prioritize macroeconomic development when allocating government funds and setting priorities. This results in environment ministries that are under resourced and politically weak in comparison to ministries for economic and natural resource development. While international technical and financial aid has helped scores of countries to develop environmental framework laws, neither domestic budgeting nor international aid has been sufficient to create strong environmental agencies, adequately build capacity for agency staff and national judges in environmental law, or create enduring education about and enforcement of the laws. As a result, many of these laws have yet to take root across society, and in most instances, there is no culture of environmental compliance.

One of the greatest challenges to environmental rule of law is a lack of political will. Indeed, Thomas Carothers, an international expert on rule of law, has observed that "The primary obstacles to [rule of law] reform are not technical or financial, but political and human."¹³ This is particularly true of rule of law in environmental contexts. Often, there is a perception that environmental rules will slow down or impede development, with too little consideration of the ways in which environmental rules contribute to sustainable development over the long term. As a result, environmental ministries are often marginalized and underfunded.

A widespread problem with the initial framework laws is that many were based on laws of other countries and failed to represent the conditions, needs, and priorities of the countries into which they were imported.¹⁴ Moreover, framework environmental laws often lack key provisions needed for effective implementation. They often did not specify concrete outcomes or set objective goals against which to measure the laws' performance. Only a few countries, such as Kenya and South Africa, have adapted their laws to more closely reflect domestic conditions and priorities.

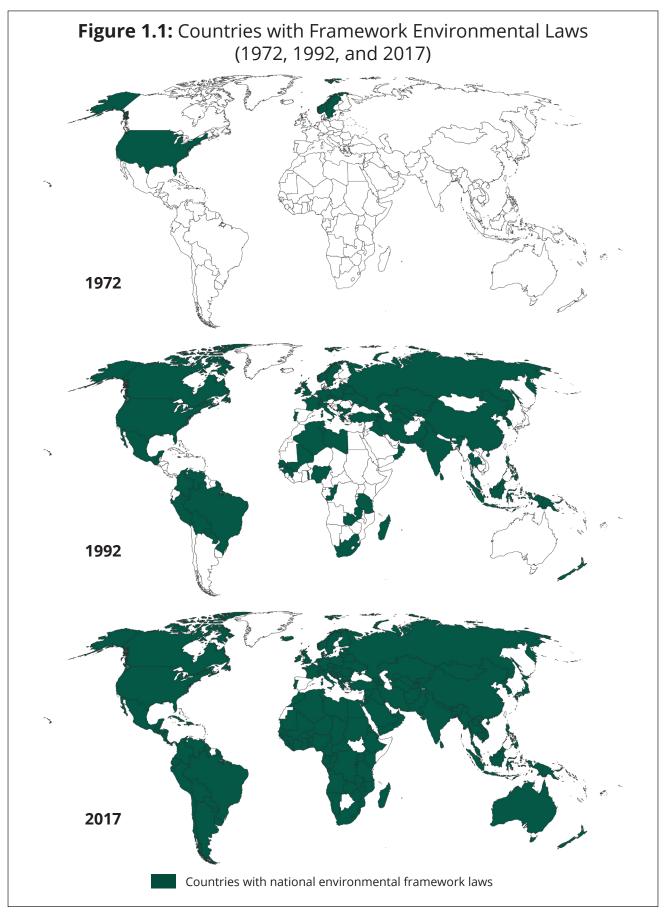
In addition, laws may be uneven in their content and implementation. Donor support may focus on a particular area of the environment, such as wildlife protection or climate adaptation, but neglect other important topics, like protection of the environmental health of children. This can lead to fragmented approaches that can result in robust environmental programs in some areas, and no funding or attention to other areas. Moreover, when funding lapses, oncerobust government programs can suddenly collapse. This intermittent, patchwork approach can undermine environmental rule of law by not providing consistency in implementation and enforcement and by sending confusing messages to the regulated community and the public.

Shortcomings in implementing environmental law are by no means limited to developing nations. Many developed nations have adopted aggressive and comprehensive environmental laws but have stumbled in their implementation. In 2017, the European Commission published the results of the first in a series of biennial reviews of Member States' implementation of environmental

¹² UNEP 2012b.

¹³ Carothers 1998.

¹⁴ Ristroph, 2012, 10869.



Year	Countries with national environmental framework laws
1972	Norway, Sweden, United States
1992	 Algeria, Armenia, Azerbaijan, Belarus, Bolivia, Brazil, Bulgaria, Canada, China, Colombia, Congo, Czechoslovakia, Democratic People's Republic of Korea, France, Gambia, Germany, Greece, Guatemala, Guinea, India, Indonesia, Iran, Iraq, Ireland, Italy, Jamaica, Kazakhstan, Kyrgyzstan, Latvia, Libya, Lithuania, Luxembourg, Madagascar, Malaysia, Mali, Malta, Marshall Islands, Mauritius, Mexico, Micronesia, Netherlands, New Zealand, Nigeria, Norway, Oman, Pakistan, Palau, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Republic of Korea, Russia, Saint Kitts and Nevis, Samoa, Senegal, South Africa, Sri Lanka, Swaziland, Sweden, Switzerland, Tanzania, Thailand, Togo, Tunisia, Turkey, Turkmenistan, Ukraine, United Kingdom, United States, Uzbekistan, Venezuela, Yugoslavia, Zambia
2017	 Afghanistan, Albania, Algeria, Angola, Antigua and Barbuda, Argentina, Armenia, Australia, Austria, Azerbaijan, Bahrain, Bangladesh, Belarus, Belize, Benin, Bhutan, Bolivia, Bosnia and Herzegovina, Brazil, Brunei Darussalam, Bulgaria, Burkina Faso, Burundi, Cabo Verde, Cambodia, Cameroon, Canada, Central African Republic, Chad, Chile, China, Colombia, Comoros, Congo, Costa Rica, Côte d'Ivoire, Croatia, Cuba, Czech Republic, Democratic People's Republic of Korea, Democratic Republic of the Congo, Denmark, Djibouti, Dominican Republic, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Estonia, Eswatini, Ethiopia, Fiji, Finland, France, Gabon, Gambia, Georgia, Germany, Ghana, Greece, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hungary, Iceland, India, Indonesia, Iran, Iraq, Ireland, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kiribati, Kuwait, Kyrgyzstan, Laos, Latvia, Lebanon, Lesotho, Liberia, Libya, Liechtenstein, Lithuania, Luxembourg, Madagascar, Malawi, Malaysia, Maldives, Mali, Malta, Marshall Islands, Mauritania, Mauritius, Mexico, Micronesia, Mongolia, Montenegro, Morocco, Mozambique, Myanmar, Namibia, Nepal, Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Oman, Pakistan, Palau, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Qatar, Republic of Korea, Republic of Moldova, Romania, Russia, Rwanda, Saint Kitts and Nevis, Samoa, San Marino, Sao Tome and Principe, Saudi Arabia, Senegal, Serbia, Seychelles, Sierra Leone, Singapore, Slovakia, Slovenia, Solomon Islands, South Africa, Sri Lanka, Sudan, Sweden, Switzerland, Syria, Tajikistan, Tanzania, Thailand, The former Yugoslav Republic of Macedonia, Timor-Leste, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Tuvalu, Uganda, Ukraine, United Arab Emirates, United Kingdom, United States, Uruguay, Uzbekistan, Vanuatu, Venezuela, Viet Nam, Yemen, Zambia, Zimbabwe

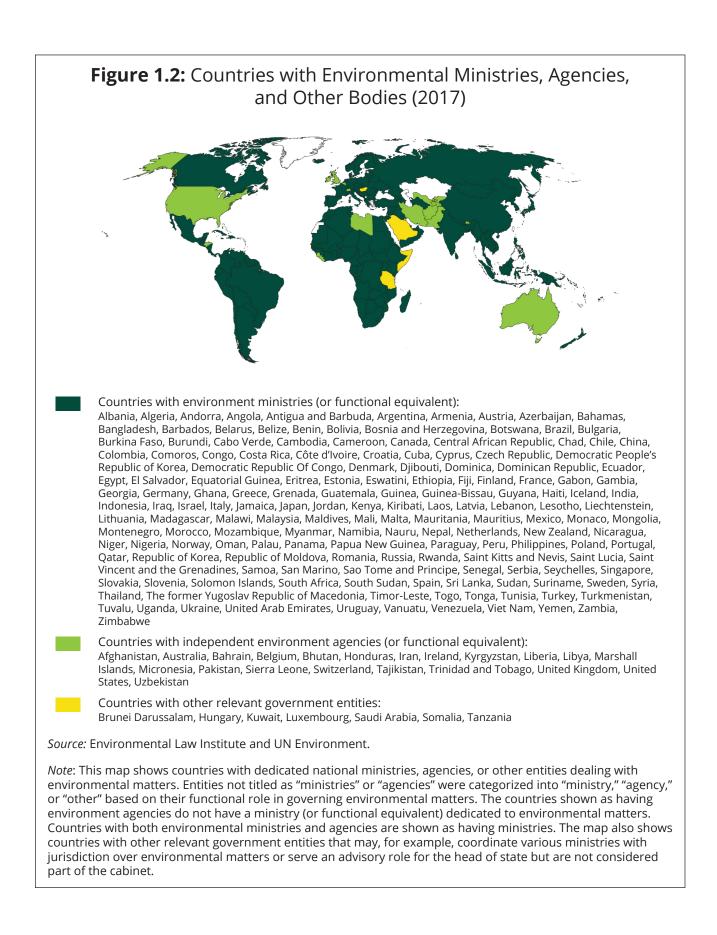
Source: Environmental Law Institute, based on research conducted using FAOLEX, ECOLEX; and other databases.

Note: This map shows countries with national environmental framework laws and does not include countries with national sectoral legal instruments (e.g., water act or forest code)

law.¹⁵ The review found that countries faced implementation gaps in waste management, nature and biodiversity, air quality, noise, and water quality and management. In particular, it found that Member States suffered from ineffective coordination among local, regional, and national authorities; lack of administrative capacity and financing; lack of knowledge and data; insufficient compliance assurance mechanisms; and lack of integration and policy coherence.¹⁶ Similarly, reviews of U.S. Environmental Protection Agency performance concluded that not only were there substantial rates of noncompliance in several sectors, but the Agency could not even determine the extent of compliance in

¹⁵ European Commission 2017.

¹⁶ Ibid., 13.



some sectors.¹⁷ U.S. states, which implement many U.S. federal environmental laws, also fell short. While the federal government set a goal that states should inspect all major air permit holders every two years, in 2010 only 8 of the 50 states did so; and a similar goal for inspection of all major water permit holders was met by only 2 of 50 states.¹⁸

Countries have adopted a range of measures (discussed in this Report) to address this implementation gap. Countries have been building institutional capacity, accountability, and integrity of environmental agencies, courts, and others to help ensure that environmental laws are implemented, complied with, and enforced. Numerous studies demonstrate that improving governance through stronger institutions that are resilient and resistant to corruption results in higher per capita incomes overall, particularly in countries that rely on natural resource extraction.¹⁹ Countries have adopted and strengthened laws ensuring transparency and public participation, including 65 out of 70 countries surveyed having at least some legal provisions for citizens' right to environmental information.²⁰ Countries have reinforced and publicized the linkages between human rights and the environment, which has elevated the normative importance of environmental law and empowered courts and enforcement agencies to enforce environmental requirements. Finally, countries have sought to enhance their courts by improving access to justice to resolve disputes in a fair and transparent manner. Because of the technical nature of environmental matters, over 350 environmental courts and tribunals have been established in over 50 countries around the world, including those established at the regional, provincial, or state level.²¹

While many countries are endeavoring to strengthen implementation of environmental law, a backlash against environmental law has

also occurred. Resistance to environmental laws has been most dramatic in the harassment, arbitrary arrests and detentions, threats, and killing of environmental defenders-forest rangers, government inspectors, local activists, and professionals working to enforce environmental norms. Between 2002 and 2013, 908 people were killed in 35 countries defending the environment, land, and natural resources; and the pace of these kinds of killing is increasing.²² During 2016, more than 200 defenders were killed in 24 countries.²³ From park rangers being killed in Virunga National Park in the Democratic Republic of the Congo to the 2016 murder of Berta Caceres, the leader of a Honduran nongovernmental organization, intimidation and violence against environmental implementers, enforcers, activists, and regular citizens is a significant threat to environmental law observance and the rule of law itself.

A second backlash has been to restrict efforts by civil society. Civil society plays a vital role in ensuring environmental law is implemented and enforced fairly and transparently. However, in the past 20 years, a growing number of countries have imposed legal restrictions on civil society involvement and funding. For example, some countries only allow those civil society organizations that are tightly controlled by the government to participate in environmental decision making, and these organizations do not necessarily represent the public's interests. Other countries restrict funding for civil society from foreign sources or limit the ability of foreign organizations to operate in their countries. China recently ordered over 7,000 foreign nongovernmental organizations to find a Chinese governmental correspondent to vouch for them and then to register with the police—or stop working in China.²⁴ These growing restrictions, shown in Figure 1.3, can also impair the ability of the public to speak up about environmental injustices and be

¹⁷ Farber 2016, 11.

¹⁸ Markell and Glicksmann 2014, 48.

¹⁹ See Section 2.1.2.1 infra.

²⁰ Environmental Democracy Index 2015.

²¹ Pring and Pring 2016, xiii.

²² Global Witness 2014; OHCHR 2015c.

²³ Global Witness 2017, 6.

²⁴ Wong 2016.



heard when domestic political forces are aligned against them. The efforts to restrict civil society extend well beyond China, as Russia, Turkey, Viet Nam, Cambodia, and many other countries have seen similar trends recently; and in many cases, the restrictions extend beyond environmental issues.²⁵ Increasingly legislators, policymakers, and stakeholders are recognizing the harms being brought about by the fragmented state of environmental governance and threats to civil society and environmental defenders. To address this situation, environmental rule of law offers a conceptual and policy framework for strengthening the implementation of environmental law in a systematic and holistic manner. This conceptualization has been gaining popularity across the globe in the past several years as a way to give life to environmental laws and to build stronger rule of law across all of society.

1.1.2 Environmental Rule of Law Defined

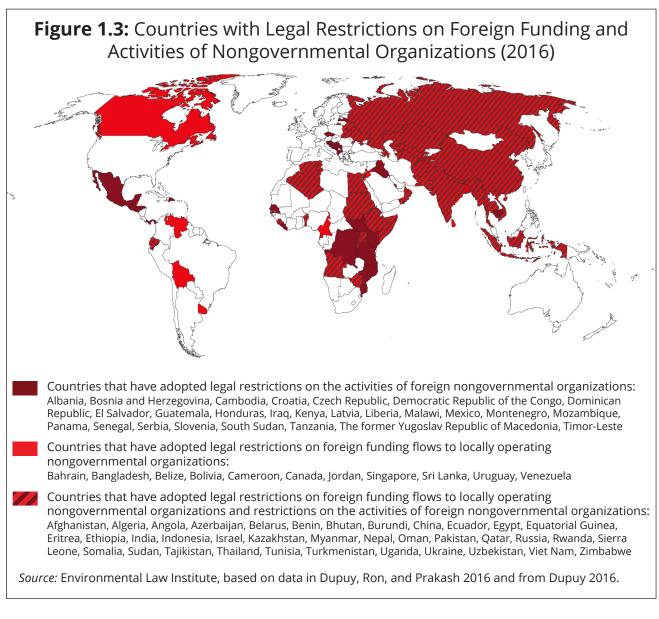
The United Nations defines rule of law as having three related components, as shown in Figure 1.4: law should be consistent with fundamental rights; law should be inclusively developed and fairly effectuated; and law should bring forth accountability not just on paper, but in practice—such that the law becomes operative through observance of, or compliance with, the law. These three components are interdependent: when law is consistent with fundamental rights, inclusively promulgated, and even-handedly and effectively implemented, then the law will be respected and observed by the affected community.

Environmental rule of law incorporates these components and applies them in the environmental context. As such, environmental rule of law holds all entities equally accountable to publicly promulgated, independently adjudicated laws that are consistent with international norms and standards for sustaining the planet. Environmental rule of law integrates critical environmental needs with the elements of rule of law, thus creating a foundation for environmental governance that protects rights and enforces fundamental obligations.²⁶

While drawing from broader rule of law principles, environmental rule of law is unique in its context, principally because environmental rule of law governs the vital link between humans and the environment that supports human life and society, as well as life on the planet. This critical importance stands in stark contrast to the politics that often surround the environment. Often environmental ministries are among the weakest ministries, with comparatively fewer staff and less political clout; yet the political economy often drives environmental violations. Why should companies invest in pollution control technologies if there is little likelihood of enforcement, the penalties are too low and can be incorporated as a cost of doing business, and there is widespread noncompliance? And what are the disincentives to grabbing land, forests, minerals and other resources, when the financial rewards are so high?

This dual challenge of the lack of incentives for environmental compliance and of the weaker capacity for implementation and

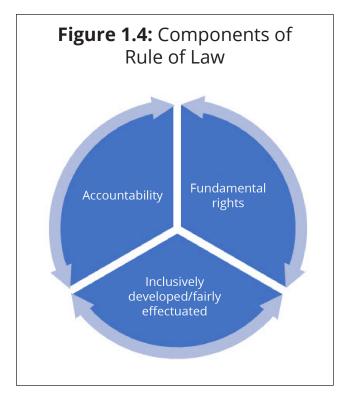
²⁵ European Foundation Centre 2017.



enforcement—combined with the fundamental need all people have for clean air, food, and water—drives the need to pay particular attention to environmental rule of law.

1.1.3 The Unique Context for Environmental Rule of Law

Environmental rule of law is key to addressing the full range of environmental challenges, including climate change, biodiversity loss, water scarcity, air and water pollution, and soil degradation. It imbues environmental objectives with the essentials of rule of law and underpins the reform of environmental law and governance. Driven by these goals, the push for environmental rule of law has gone from obscurity to ubiquity. It emerges from two age-old truths. First, voluntary measures alone are not enough to ensure sustainable management of the environment upon which people and the planet depend. Binding systems of laws—with standards, procedures, rights, and obligations—are



necessary to avoid the tragedy of the commons.²⁷ Second, as with any other area of law, legal objectives can only be fulfilled when there is rule of law.²⁸ It also emerges from the circumstantial reality that environmental rule of law gaps stand as a major impediment to achieving environmental and sustainable development ambitions.

Environmental rule of law is key to achieving the Sustainable Development Goals.²⁹ Indeed, it lies at the core of Sustainable Development Goal 16, which commits to advancing "rule of law at the national and international levels" in order to "[p]romote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels."

Environmental rule of law has seven distinguishing characteristics, as illustrated in Figure 1.5, that make it both particularly important and challenging to implement. These are discussed in turn.

Box 1.1: Contrasting Environmental Rule of Law and Environmental Governance

While environmental rule of law and environmental governance are related, there are distinctions in objectives and scope.

Environmental rule of law focuses on ensuring compliance with and enforcement of environmental laws. Environmental governance comprises a broader set of objectives and approaches related to making and implementing decisions related to the environment—with environmental rule of law speaking particularly to the implementation.

Even when addressing similar issues, there can be distinctions. For example, environmental rule of law emphasizes civic engagement as a means to improve adherence to the law, while environmental governance takes a broader view of civic engagement (aiming to improve the quality of decision making, enhance public voice, and build civic support, as well as improve compliance and enforcement).

First, *environmental rule of law is critical to human health and welfare*. It ensures adherence to the standards, procedures, and approaches set forth in the laws to ensure clean air, clean water, and a healthy environment. Environmental rule of law is also important to ensuring people's rights to access and use land, water, forests, and other resources are respected and protected, thus advancing livelihoods, food security, and dignity.³⁰

²⁷ Hardin 1968.

²⁸ Carothers 1998; Marmor 2004.

²⁹ Akhtar 2015.

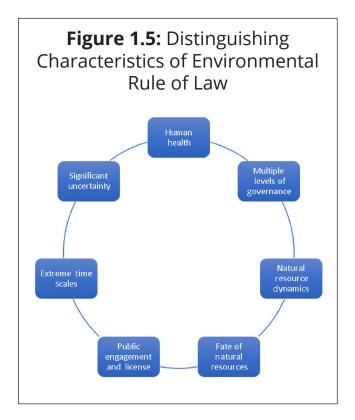
³⁰ Bosselmann 2014; Daly and May 2016.

Environmental Rule of Law



Second, environmental rule of law is emphatically multidimensional. It cuts across many forms of law and norms-from social and customary norms of villages to statutory laws of nations to voluntary standards adopted by companies. It also cuts across many levels of governance—from customary governance among indigenous peoples and rural populations to subnational, national, regional, and international government regulation. It often resides in more than one agency or ministry across several levels of government, meaning that regulation of a mine, for example, may involve the environmental, water, mining, labor, finance, social development, and justice ministries at the national and often subnational levels.

Third, environmental rule of law is shaped by and responds to significant political, economic, and social dynamics that are particular to natural resources, namely the **tragedy of the commons** and the **resource curse**. For example, the limited capacity of the planet to support life with exhaustible natural resources and the tendency of common pool resources to be depleted if not managed with care both highlight the centrality of environmental rule of law in preventing the



tragedy of the commons.³¹ The experience of many countries endowed with significant natural resource wealth is that too often these resources prove a curse instead of a blessing, in that extraction of the resources often fosters corruption, rent seeking,³² and inequitable distribution of the proceeds, which can lead to political strife, instability, and even armed conflict.³³ To prevent this resource curse, countries have invoked key elements of the environmental rule of law, including transparency, participation, accountability, and benefit sharing.³⁴

Fourth, management of the environment also implicates the moral and ethical *duties humans owe non-human species and resources*. Many species' survival rests upon the success of environmental rule of law. Some countries are extending legal rights or legal personhood to natural resources, such as rivers and protected areas, to reflect the customary importance they hold in their cultures.³⁵

Fifth, because so many human communities depend upon natural resources for their livelihoods and welfare, and are affected by the conditions of the environment around them, and because all humans depend on clean air and water, **public involvement** in environmental decisions and laws is particularly important.³⁶ Pollution and environmental degradation tend to disproportionately affect disadvantaged

- 33 Auty 1993; Karl 1997; Ross 2004.
- 34 Adani and Ricciuti 2014; Epremian, Lujala, and Bruch 2016.
- 35 See Section 4.1.3 infra.
- 36 Eden 1996; Beierle 2010.

populations and indigenous communities who rely on natural resources for subsistence and cultural identity. Moreover, given their particular interest in protecting their health, livelihoods, and welfare, the public has a particular interest in ensuring that projects adhere to the required environmental standards and procedures; as such, they can provide an often-needed supplement in monitoring compliance and supporting enforcement.³⁷ Thus, the growing recognition of the need to supply the public with access to information, meaningful participation in decision making, and access to justice and, if applicable, to obtain free, prior, and informed consent is particularly salient in environmental rule of law.

Sixth, environmental rule of law must also contend with **uncommon timescales**. Management decisions about natural resources and the health of ecosystems can affect many generations into the future—a timescale of many centuries and more. Frequently such decisions are irreversible, as they impact the survival of a species, the use of a finite resource, or a potential tipping point, such as the amount of greenhouse gases emitted into the atmosphere causing cascading changes.³⁸ Thus, environmental rule of law implicates intergenerational equity and people who are not yet born.³⁹ Moreover, technologies and behaviors affecting the environment are dynamic and often quickly evolving. Too often, environmental laws lag behind the environmental threats. This emphasizes the importance of adaptability and dynamic environmental laws and institutions.

Finally, environmental rule of law often depends on *decision making in the face of significant uncertainty*.⁴⁰ Limits on current scientific understanding means that environmental matters can raise more

- 38 Solomon et al. 2009; Moore 2008; Scheffer, Carpenter, and Young 2005.
- 39 *See, e.g.,* Brown Weiss 1983; Brown Weiss 2007; Solow 1974.
- 40 Ebbesson 2010.

³¹ Hardin 1968; Nagan 2014; Johnson 2015. "Tragedy of the commons" refers to a situation in a sharedresource system (such as a common grazing area) where individual users acting independently and advancing their own interests behave contrary to the common good of all users by depleting or spoiling that resource and collectively degrade the integrity and health of that resource system.

^{32 &}quot;Rent seeking" refers to attempts to capture economic benefits without contributing to the overall economic production. Rent seeking often happens through resource capture, corruption, and patronage. Rustad, Lujala, and Le Billon 2012.

³⁷ Greve 1990; Daggett 2002.

questions than answers. What is a safe level of exposure to a particular chemical? What are the long-term effects of nanotech (or other new technologies) on public health and agriculture? How much will the sea level rise by 2100? What are the long-term effects on the ecosystem if a particular species goes extinct? But circumstances often demand government action, even in the face of such uncertainty—or especially in the face of such uncertainty. One response-starting in the 1970s—was the development of adaptive management, which provides a framework for taking action in light of uncertain data and understanding.⁴¹ Another approach has been the creation of the precautionary principlethe tenet that when confronted with a lack of information, actions should be taken that err on the side of precaution rather than increasing risk.42

Thus, environmental rule of law is unique in its complexity, long time horizon, operation at the cutting edge of technology and scientific understanding, its transcendent reach across environmental, economic, and social matters, and its centrality to human and non-human well-being.

1.1.4 This Report

This Report focuses on the implementation gap between the many environmental goals, laws, regulations, and policies adopted and the on-the-ground reality of environmental conditions, compliance with environmental law, and community engagement in environmental decision making. It explains how environmental rule of law provides a framework for giving meaning to environmental laws already on the books and for helping to foster cultures of compliance with environmental law across nations. It has become increasingly apparent that failure to implement and enforce environmental law directly threatens environmental progress and sustainability. The United Nations Environment Programme's Governing Council declared that "the violation of environmental law has the potential to undermine sustainable development and the implementation of agreed environmental goals and objectives at all levels and that the rule of law and effective governance play an essential role in reducing such violations."⁴³ And the first United Nations Environment Assembly called on all countries "to work for the strengthening of environmental rule of law at the international, regional and national levels".44

Implementing environmental rule of law is not simply about bringing violators to justice.

While enforcing existing laws is critical, **the ultimate goal of environmental rule of law is to change behavior onto a course toward sustainability by creating an expectation of compliance with environmental law** coordinated between government, industry, and civil society. If environmental rule of



⁴¹ Walters 1986; Ruhl 2005; Williams, Szaro, and Shapiro 2009.

⁴² Cameron and Abouchar 1991; Harremoes et al. 2002; Marchant 2003.

⁴³ UNEP 2012a.

⁴⁴ UNEP 2014b.

law takes root, parties will know what the laws require of them, what their rights are and how to safely exercise them, and what consequences to expect if they fail to comply. Parties who are aggrieved will have ready access to remedies for environmental violations, and the public's views on environmental issues will be both informed by government's sharing of information and reflected in governmental decisions. This culture of transparency, justice, and collaboration can build relationships and trust between stakeholders to address controversies that will no doubt arise. While environmental rule of law does not eliminate disagreements or necessarily alter differing perspectives over environmental and natural resource management issues, it does build the resiliency of government and of stakeholder relationships to resolve these differences in an organized, rational, and peaceful manner, to the benefit of the environment and of all in society.

Environmental rule of law is relevant at all levels of government, as noted by the United Nations Environment Assembly. This Report focuses predominantly on national level measures to implement and strengthen environmental rule of law. Many of the lessons and experiences discussed apply at the subnational and regional levels, and the Report refers to international, regional, and subnational practices, but it is aimed primarily at national efforts.

This Report is organized in six parts, as shown in Figure 1.6: an introduction; four substantive chapters on institutions, civic engagement, rights, and justice; and a future directions and recommendations section. This is the first global assessment of the environmental rule of law, and the four substantive chapters represent in-depth analyses of a few selected priority issues within the broader field of environmental rule of law. The methodology guiding this Report's development is explained in Box 1.2

The Institutions chapter reviews the critical role institutions, such as government agencies and courts, play in environmental rule of



law and the key opportunities for building stronger environmental institutions. In particular, the chapter highlights the need for clear and appropriate mandates; coordinating across sectors and levels of government; developing the capacity of institutions and personnel; collecting, using, and disseminating reliable data; employing independent audit and review mechanisms; ensuring the fair and consistent enforcement of law; and deploying leadership and management skills to empower staff and model behavior. The chapter concludes that with the proper mix of capacity, accountability, resources, integrity, and leadership, environmental institutions are poised to greatly narrow the implementation gap in environmental rule of law.

The Civic Engagement chapter explores the legal and practical tools for civic engagement that continue to evolve at the international and national levels in support of more effective environmental rule of law. Civic engagement consists of providing the public meaningful access to information and engaging the public to participate in environmental decision making.⁴⁵ After reviewing the various types of civic engagement, its benefits, and challenges

⁴⁵ Access to justice—the third prong of Principle 10 of the Rio Declaration—is addressed in the Justice chapter.

Box 1.2: Methodology for Developing This Report

This Report was assembled as a desk study by the Environmental Law Institute on behalf of UN Environment. It is based upon extensive research and solicitation of examples and experiences from the Montevideo focal points and from attendees at World Conservation Congress events and Law, Justice and Development Week events where the topic was discussed. The framework of this Report derives from the United Nations Environment Programme's Issue Brief "Environmental Rule of Law: Critical to Sustainable Development" as well as the United Nations Environment Programme Governing Council Decision 27/9 on advancing justice, governance, and law for environmental sustainability.^a

Recognizing that environmental rule of law is relevant to all countries, the Report has endeavored to draw on the experiences, challenges, viewpoints, and successes of diverse countries across the world. Accordingly, examples and case studies and citations are illustrative of the dynamic or approach; often, experiences from other countries could be used instead.

Drafts of this Report were reviewed by Montevideo focal points and a number of subject matter experts.

a. The germinal article "Foundations of Sustainability" by Scott Fulton and Antonio Benjamin laid the groundwork for these later developments. *See* Fulton and Benjamin 2011.

to its implementation, the chapter discusses the meaningful ways in which States are providing access to environmental information and enhancing public participation in environmental decision making, ranging from real-time access to ambient environmental data to empowering citizens to manage local resources. It concludes that transparency and participation are central to the environmental rule of law because they can help identify when there is a violation and prevent potential future violations, as well as the broader benefits of enhancing public trust, social cohesion, and environmental governance.

The Rights chapter reviews the evolving relationship between environmental rule of law on the one hand and constitutional, human, and other rights related to the environment on the other. It traces the origins of environment-related rights (see Box 1.3) and examines the many rights, including those related to life, health, food, and water, that are closely linked to the environment. In turn, it explores how procedural rights, such as rights to information, participation in government, justice, and nondiscrimination, are themselves essential elements of environmental rule of law. The chapter then reviews the role a right to a healthy environment plays in many countries, and how enforcing the rights to nondiscrimination, free association, and free speech are necessary for environmental rule of law. The chapter also reviews environmental defenders' critical role in protecting the environment and the importance of protecting these defenders through human rights mechanisms and other approaches. It concludes that just as constitutional and human rights cannot be realized without a healthy environment, environmental rule of law is predicated upon respect for constitutional and human rights.

Box 1.3: Environment-Related Rights

There is a wide range of substantive and procedural rights related to the environment (sometimes referred to as "environmental rights").^a These include substantive rights, such as the rights to a healthy environment, to life, and to water. They also include procedural rights, such as the rights of access to information, public participation, access to justice, and nondiscrimination.

These rights relate to the environment in two key ways. First, many rights require certain environmental conditions or inputs for their enjoyment (such as the right to life).^b Second, many rights, especially procedural rights, are indispensable to the environmental rule of law even if the rights apply generally and are not limited to the environmental context.

These rights are recognized and protected by national constitutions and laws; international human rights law, international environmental law, and other international law; and by provincial and other subnational constitutions and laws.

In some instances, there is wide agreement on the existence and scope of an environment-related right (such as the right to water); others are more contested. Accordingly, in a particular instance, it is necessary to consider which national constitution and laws, international human rights instruments, and other international legal instruments apply (as well as subnational instruments, in certain cases).

For a more detailed analysis of environment-related rights, see the Rights chapter.

a. Shelton 1991; Boyle 2007; Boyd 2012; Feris 2017.

The Justice chapter explores how a fair, transparent justice system that efficiently resolves natural resource disputes and enforces environmental law is critical to establishing environmental rule of law. The chapter surveys the key components of effective environmental adjudication. Parties must be able to avail themselves of the law and its protections and sanctions without undue financial, geographic, language, or knowledge barriers. The dispute resolution or enforcement process needs to be fair, capable, transparent, and characterized by integrity. Finally, remedies available through the justice process must address the harms and grievances raised, and be sufficient to deter future violations. The chapter also considers key opportunities for improving

justice in environmental cases, and shares innovative practices, such as restorative justice. It concludes that while the effective and peaceful resolution of the legal issues in an environmental dispute is key, it is also important to address the underlying social and political conflicts that often drive environmental conflicts.

The Report's conclusion emphasizes that achieving sustainable development depends upon strengthening environmental rule of law. This means engaging diverse actors to conduct regular assessments on the environmental rule of law. There are significant data gaps and a need for indicators to measure, track, and report on environmental rule of law performance. The

b. See Box 4.2.



conclusion offers a framework for indicators. Finally, the conclusion provides a roadmap for implementing and tracking the effectiveness of environmental rule of law moving forward.

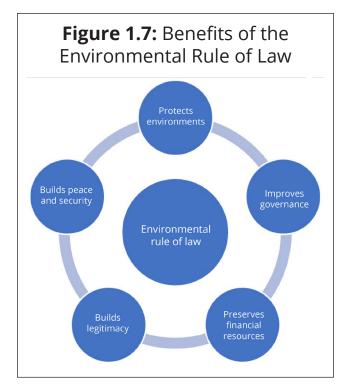
1.2 Benefits of the Environmental Rule of Law

The benefits of environmental rule of law extend far beyond the environmental sector. While the most direct effect is in protection of the environment itself, it also strengthens general rule of law, supports sustainable economic and social development, contributes to peace and security by avoiding and defusing conflict, and protects the fundamental rights of people. Figure 1.7 captures these benefits.

Environmental rule of law protects public health as well as the environment and the sustainable use of natural resources. To be effective, wildlife conservation, climate change adaptation, pollution control, and resource management, for example, all depend on environmental rule of law. Numerous studies show that when environmental laws are enforced and a culture of compliance takes root, positive environmental results follow, such as increased wildlife populations, decreased human health impacts from air and water pollution, and improved ecosystem services, such as provision of clean drinking water.⁴⁶ These benefits are not simply the result of government action alone but are the result of a collaborative effort across society to address environmental issues. For example, the International Development Law Organization assisted in protecting environmental endowments and tourism by limiting poaching and helping to strengthen wildlife conservation and climate change adaptation laws in Kenya.⁴⁷ And initiatives such as the Kimberley Process and the Forestry Law Enforcement, Governance and Trade initiative show how companies can be active partners—and even leaders—in

⁴⁶ See Section 2.1.2.1 infra.

⁴⁷ IDLO 2014, 35.



ensuring only legally extracted resources enter the chain of commerce.⁴⁸

Environmental rule of law reduces corruption and noncompliance in natural resource management, which attracts investment in a country's resource sector. Experience shows that companies are more likely to comply with the law when other companies also comply and when government has made clear that compliance is expected.⁴⁹ Further, compliance efforts reward good actors by assuring them they will not be at a competitive disadvantage by investing in compliance with environmental laws. The rule of law thus reinforces positive behavior by rewarding responsible businesses, for example, in the forest sector by ensuring prosecution of illegal logging.⁵⁰ While unsustainable development may serve short-term financial interests of particular individuals or entities, environmental rule of law plays an important role in protecting financial interests of a state's citizens and future generations over the long term, both individually and collectively. Sustainable management of natural resources and maximization of their financial value provide a foundation for long-term investment, which can serve to grow markets and expand opportunities. Environmental rule of law serves to encourage "inclusive and equitable economic growth; support investment and promote competition; provide access to information and markets for the poor and marginalized; secure land and property title; and provide mechanisms for equitable commercial dispute resolution."51 This connection between environmental rule of law and economic growth is reflected in various development indices that link different elements of environmental rule of law both to growth in gross domestic product and to a decrease in inflation and inequality.⁵² Limiting abuse of resources, such as wildlife trafficking, also preserves natural capital and cultural heritage for citizens and allows enjoyment of these resources over generations.⁵³ As such, environmental rule of law advances intergenerational equity, as well as intragenerational equity.

Environmental rule of law can also improve a company's bottom line by preventing and peacefully resolving conflicts. Where social conflicts escalate, they can disrupt operations and harm reputation and brand. For example, a study of the impacts of social conflicts on the bottom line of palm oil companies in Indonesia found that the tangible costs of social conflict range from US\$70,000 to 2,500,000.⁵⁴ The largest direct costs were lost income arising from disrupted plantation operations and staff time diverted from other tasks to address conflict. Tangible costs represent 51 to 88

52 Kaufmann and Kraay 2008, 10.

⁴⁸ See <u>https://www.kimberleyprocess.com</u>; <u>http://www.euflegt.efi.int</u>. See also the International Tin Code of Conduct, whose first principle is "Maintain legal compliance...." <u>https://www.internationaltin.org/code-of-conduct/</u>.

⁴⁹ See Section 2.6.1 infra.

⁵⁰ Davis et al. 2013.

⁵¹ IDLO 2014, 24.

⁵³ UN Environment Assembly 2014; London Conference on the Illegal Wildlife Trade 2014.

⁵⁴ IBCSD 2016.

percent of plantation operational costs, and 102 to 177 percent of investment costs on a per hectare per year basis. In addition, social conflicts had intangible or "hidden" costs that range from US\$600,000 to 9,000,000, representing expenditures or indirect losses associated with, for the purposes of this study, risk of: conflict recurrence or escalation; reputational loss; and risk of violence to property and people.

Environmental rule of law strengthens rule of law more broadly by increasing trust in the government and solidifying its legitimacy. Strong environmental rule of law involves the public and other stakeholders in government decision making and holds decision makers accountable for the outcomes of their actions. This helps engender trust across society.55 For example, when local communities are meaningfully informed about and engaged in natural resource management decisions, they are more likely to have a sense of policy ownership and convince others to respect the decisions. Such decisions may range in scale from village-based management plans to transnational water agreements. This kind of cooperation can help to cure significant democratic deficits. Environmental cooperation builds trust⁵⁶ and limits the power of non-state, non-citizen actors to coopt the actions of the government.⁵⁷ Legitimacy brings with it the collateral benefit of lessening criticism, resistance, and discontent. While States are often concerned about public resistance, States have begun to allow citizen and civil society participation in government decisions to avoid their disapproval and obtain their support.58

The United Nations has noted a final, vital benefit of environmental rule of law: "Proper management of natural resources, in accordance with the rule of law, is also a key factor in peace and security"⁵⁹ Evidence demonstrates, for example, that a state

59 UN n.d.

can prevent both local and regional unrest by protecting land rights and peacefully resolving land disputes.⁶⁰ With over 40 percent of internal armed conflicts over the last 60 years linked to natural resource issues,⁶¹ maintaining a peaceful society depends on vindication of environment-related rights.

The myriad benefits of environmental rule of law were demonstrated by the European Commission's review of how Member States are implementing environmental law. Three of the many identified examples of what could be achieved if States fully implemented European Union environmental requirements were:

- full compliance with European Union waste policy by 2020 could create an additional 400,000 jobs and an additional annual turnover of EUR€42 billion in the waste management and recycling industries;
- if existing European Union water legislation were to be fully implemented, and all water bodies to achieve a "good" status ranking, the combined annual benefits could reach at least EUR€2.8 billion; and
- while the Natura 2000 network of protected areas already delivers estimated gains of EUR€200-300 billion per year across the European Union, full implementation of Natura 2000 would lead to the creation of 174,000 additional jobs.⁶²

Thus, environmental rule of law provides environmental, economic, social cohesion, human rights, and security benefits that represent a significant return on investment.

⁵⁵ Davis et al. 2013.

⁵⁶ Getliffe 2002, 101.

⁵⁷ Kaufmann 2015.

⁵⁸ Ferris and Zhang 2003, 569; see also Chapter 3.

⁶⁰ Knight et al. 2012.

⁶¹ UNEP 2009.

⁶² European Commission 2017, 2.

1.3 Core Elements of Environmental Rule of Law

Environmental rule of law comprises many elements, as it represents the efficient and effective functioning of environmental governance across multiple levels of institutions, sectors, and actors. The United Nations Environment Programme's Governing Council identified seven core elements,⁶³ depicted in Figure 1.8. These are discussed in turn.

1.3.1 Fair, Clear, and Implementable Environmental Laws⁶⁴

Environmental rule of law is premised upon fair, clear, and implementable laws.⁶⁵ Laws that are fair adhere to rule-of-law principles of "supremacy of law, equality before the law, accountability to the law, fairness in the application of the law, separation of powers, participation in decision making, legal certainty, avoidance of arbitrariness, and procedural and legal transparency."⁶⁶ These principles of fairness call for all persons and entities, including the State itself, to be subject to and accountable for complying with law and for the laws to be administered and enforced with transparency.⁶⁷

Clarity in laws ensures that they are easily understood so that their requirements are unambiguous and they can be implemented properly. Those reading the law should be able to understand the implications of the law and the obligations it imposes on both those it regulates and those who are charged with implementing and enforcing it. Additionally, laws need to clearly delineate responsibility across organizations, particularly as they relate to the enforcement of the law. For example, early environmental regulations in China were ambiguous as to who was responsible for enforcement. The national government believed it was the responsibility of local government, while local governments often did not wish to enforce environmental regulations as that would disadvantage local businesses. The Chinese government subsequently revised its laws to provide greater clarity and accountability.68

Laws should also be readily implementable and adapted to the national context, meaning that the approaches are effective in the particular institutional, cultural, and economic context of the country. It is also important for the laws to contain the procedures and mandates necessary to carry out the law's requirements. As discussed in Case Study 1.1, it is important for environmental laws to keep pace with technological developments as well.

Another example of a critical gap in legislation, implementation, and enforcement that enables practices with negative impacts on a country's economy to continue, environment, and health is the issue of lead paint, which is still allowed in over 100 countries. See Case Study 1.2.

Environmental laws and regulations often risk being sidelined by other legal provisions. For example, over 3,000 trade agreements contain investor-state dispute settlement

⁶³ UNEP International Advisory Council for Environmental Justice 2015.

⁶⁴ While fair, clear, and implementable laws are important to the environmental rule of law, the laws themselves are only one of several major limitations on the environmental rule of law. It is clear that gaps and thinness in drafting of environmental laws can be an important factor impeding effective implementation and enforcement. That said the substantive chapters of this Report focus primarily on other, less obvious reasons for gaps in implementing and enforcing environmental law. Focusing on the details of capacity, implementation, and enforcement is crucial to understanding the full dimensions of the environmental rule of law challenge facing countries across the globe.

⁶⁵ Ibid.

⁶⁶ UN 2008, 1.

⁶⁷ UNSC 2004, 4; O'Donnell 2004.

⁶⁸ Percival 2008.

provisions under which an investor can sue a country to protest its national laws and regulations.⁶⁹ These provisions have been used in some circumstances to fight against environmental laws and regulations that appear to be unfairly discriminatory against foreign investors.⁷⁰

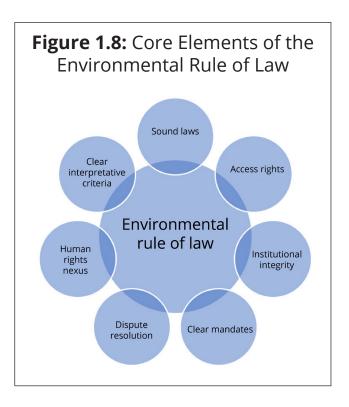
1.3.2 Access to Information, Public Participation, and Access to Justice⁷¹

Access to information, public participation, and access to justice are commonly known as the "access rights" and are a fundamental component of rule of law that are particularly salient to environmental rule of law. The access rights apply in the development, implementation, and enforcement of environmental laws and regulations. Because citizens' health and livelihoods are inextricably connected with environmental and natural resource management, there are strong social, economic, and political incentives for active engagement which can help to ensure that the regulated community and the government comply with environmental laws.

Access to information is the foundation for effective civic engagement. Environmental information, including ambient pollution levels and source-specific information, among other types of information, helps the public determine whether there is or might be a violation; it also informs whether and how to engage.

Public participation in environmental decision making improves the information available to decision makers, can enhance implementation, and provides a means for avoiding or resolving disputes before they escalate. It can also build public support for the outcome, and improve compliance.

70 Tienhaara 2006; Brower and Steven 2001.



Access to justice means that the public has ready and meaningful access to courts, tribunals, commissions, and other bodies that are charged with protecting their rights and peacefully resolving disputes. This both helps to protect the other access rights and to strengthen capacity to enforce environmental laws.

These three pillars of civic engagement build responsiveness and accountability, and as such, they are essential to environmental rule of law.

1.3.3 Accountability and Integrity of Institutions and Decision Makers⁷²

Environmental institutions are the face of environmental rule of law to the public. They are responsible for implementing and enforcing the environmental laws.

⁶⁹ USTR 2015.

⁷¹ These dynamics are examined primarily in Chapters 3 (Civic Engagement) and 5 (Justice), but also to some extent in Chapter 4 (Rights).

⁷² These issues are examined further in Chapter 2 (Institutions).

Case Study 1.1: Technological Innovations Outpace Legal Responses

It is not uncommon for technological advances to present issues not contemplated by existing environmental laws. For example, as China struggles to meet growing energy demand and reduce its use of coal, its government, in conjunction with major oil companies, has pushed aggressively to develop its shale gas resources—the largest in the world.^a

Regulations for conventional oil and gas development also apply to shale gas, but China lacks regulations to address environmental concerns specific to hydraulic fracturing, which is a relatively new technique used to extract shale gas.^b Rules for monitoring methane leaks do not exist.^c The government has not implemented environmental compliance inspections broadly enough, or set water pollution penalties high enough, to deter firms from disposing of wastewater improperly.^d Corruption challenges also undermine efforts to hold violators accountable.^e Similar concerns plague water sourcing. Given that transporting water from afar is often more expensive than withdrawing local water-sometimes even after fines are assessed for doing so illegally—economic incentives prompt operators to deplete local water resources.^f

As of 2012, no regulations governing the specific problems of fracking had been written, even as shale gas development proceeded.^g In 2014, China scaled back its shale output goals due to geological challenges.^h Yet, the industry had already taken off, with more than 600 shale gas wells drilled since 2011.ⁱ

- e. Transparency International 2015
- f. Guo, Xu, and Chen 2014.
 g. Xiaocong 2015.
 h. Feng 2015, 22-23.

- i. Oil & Gas Journal 2018.

They also have a broader socio-political role, demonstrating to the public that environmental law brings about social, economic, public health, security, and environmental benefits for all. For the public to support environmental initiatives over the long term, environmental institutions and decision makers must be accountable and demonstrate integrity. Institutions instilled with integrity and accountability are more effective at delivering enduring

sustainable development.⁷³ Institutions at all levels of governance are strengthened when they are open and accountable to their constituencies.74

Corruption can be an issue in all countries, regardless of how developed their institutions are.⁷⁵ That said, countries that

a. Shelton 1991; Boyle 2007; Boyd 2012; Feris 2017.

b. Guo, Xu, and Chen2014.

c. Ibid.

d. Ibid.

⁷³ See Section 2.1.2.1 infra.

⁷⁴ UN General Assembly 2014, para. 82.

⁷⁵ Welsch 2003.

Case Study 1.2: Lead Paint: Gaps in Legislation Harming Public Health, Economies, and the Environment

There is no known level of lead exposure that is considered to be safe, and lead paint is a major global source of childhood exposure to lead. Indeed, in many countries paint is the leading source of childhood lead exposure. The staggering impacts of lead exposure include reduced childhood IQs causing lowered productivity and earning potential, with costs estimated at over US\$950 billion in low- and middle-income countries. In many countries, the economic toll of lead exposure impacts GDP by 2-4 percent.^a Moreover, scientific studies indicate a strong association between lead exposure and violent crime rates.^b

Establishing and enforcing lead paint laws is an effective way to improve public health. Currently only one third of countries have lead paint laws. High levels of lead in paint have been found in countries that lack legal limits on lead in paint,^c and are also found in some countries that have such laws but lack effective enforcement and compliance mechanisms.

To address this challenge, UN Environment and the World Health Organization are leading the Global Alliance to Eliminate Lead Paint (the Alliance) to help countries around the world take action. This voluntary global initiative includes national governments, the paint industry, nongovernmental organizations, and academics working together to promote laws to phase-out lead paint. The Alliance has created tools to help countries develop lead paint laws, including a lead paint elimination toolkit^d and a guidance and model law for regulating lead paint.^e The guidance and model law offer suggested provisions that countries can adapt to their national legal context.

Industry is actively working with the Alliance at the global and regional level. The cost of switching to non-lead paint additives is relatively low. Paint testing studies show that paint free of lead additives is available in each of the more than 40 low and middle income countries where paint was tested, and the costs of paints without lead additives are comparable to paints with lead additives.

These lead paint elimination activities provide some insights for efforts to promote the environmental rule of law. One key insight is that establishing lead paint elimination laws that are relatively simple to implement and are regionally similar protects human health, promotes compliance, and provides a level playing field for industry. The direct benefits to public health and economic development illustrate the positive value and importance of environmental rule of law. It is critically important to pay particular attention to risks affecting vulnerable sub-populations, such as children. And voluntary partnerships can build momentum toward concrete progress by focusing on a specific goal and working across sectors, with legal, environmental, and health professionals working together, alongside industry and nongovernmental organizations.

a. NYU n.d.

b. See, e.g., Wright et al. 2008; Feigenbaum and Muller 2016; Mielke and Zahran 2012.

c. IPEN 2016.

d. UNEP 2015.

e. UNEP 2017.

rely substantially upon natural resources as a source of gross domestic product are particularly at risk from corruption because government usually controls access to the resources.⁷⁶ Studies comparing countries with similar social and economic conditions find that the presence of natural resource wealth in one country greatly increases the likelihood for corruption.⁷⁷ Transparency and accountability are the primary tools for preventing and punishing corruption, especially around natural resources.⁷⁸ Another important tool is independent government oversight through mechanisms such as environmental auditing, which both detects and deters corruption and helps focus government resources where they will be of most use.

Fair and consistent enforcement builds a culture of compliance across society, which helps engender respect for government institutions and rule of law. In particular, environmental rule of law takes root when leaders demonstrate clear and firm political will to implement environmental laws, even in the face of opposition and disagreement.

1.3.4 Clear and Coordinated Mandates and Roles, Across and Within Institutions

Environmental and natural resource management cut across sectors and involve many ministries, agencies, and departments. Effective environmental rule of law requires that institutions be given mandates that are straightforward and transparent; that detail the institution's jurisdiction, goals, and authority; and that are coordinated with other institutions. This allows leaders to focus institutional efforts and the public to ensure accountability.



Because so many institutions are engaged in environmental and natural resource protection, many countries suffer from regulatory overlap and underlap. This is especially the case when environmental institutions have been created in an ad hoc manner over time. Regulatory overlap occurs when more than one institution has authority over an issue, resulting in competing bureaucratic claims over that issue and potentially conflicting directives to the regulated community. Regulatory underlap occurs when no institution has clear authority over an issue, resulting in an orphan issue or cause for which there is no effective government oversight. Many countries suffer from lack of clarity in mandates and confusion of roles, which were identified as potential threats to Costa Rica's continued progress in implementing environmental rule of law, as noted in Section 1.1.79

⁷⁶ For a review of the literature, see Paltseva 2013.

⁷⁷ These same findings have been made when comparing resource-rich and resource-poor regions within the same country. lbid.

⁷⁸ For a review of the theory and emerging evidence on transparency in the management of extractive resources and their revenues, see Epremian et al. 2016.

⁷⁹ Keller et al. 2013, 90.

1.3.5 Accessible, Fair, Impartial, Timely, and Responsive Dispute Resolution Mechanisms

Courts, tribunals, and other mechanisms for enforcement and resolving disputes are a key element in creating environmental rule of law. Dispute resolution and enforcement mechanisms that are fair, impartial, timely, and responsive increase the likelihood that harms to environment-related rights will be addressed, that parties will meet their environmental responsibilities, and that parties who violate environmental law will be held accountable. Furthermore, public accessibility to these mechanisms increases public confidence in the judicial process and rule of law in general. Successful courts are insulated from manipulation by having their budgets protected from political interference, their judges paid commensurately with other professions, and salary levels set by independent bodies, not politicians.⁸⁰

In many countries, courts are clogged with extensive caseloads not related to environmental issues, so that it can take years for a case to be heard and years longer for a decision to be rendered. Environmental cases often involve harm to public health or irreversible damage to natural resources and need to be heard in a timely manner so that justice and the public interest may be served. As a result, over 50 countries have established environmental tribunals and many others utilize alternative dispute resolution mechanisms in hopes of resolving matters before they proceed in court.

1.3.6 Recognition of the Mutually Reinforcing Relationship Between Rights and the Environmental Rule of Law

Environmental rule of law is inextricably connected to constitutional and human rights. Many constitutional and human rights depend on the environment—without a healthy environment and the clean air, water, and sustenance it provides, people would not have the most basic necessities for life. Constitutional and human rights law in turn offers a framework for reinforcing and strengthening environmental rule of law as many environmental harms can be addressed through the protection of constitutional and human rights. Framing environmental matters in a constitutional or human rights context can bring heightened legal and moral authority to environmental violations as well as open additional avenues for addressing those violations.

Access rights and other procedural rights often provide critical mechanisms for achieving both substantive rights related to the environment under domestic or international law (such as the rights to a healthy environment, life, water, and food)⁸¹ and environmental rule of law. Thus, a reinforcing relationship exists whereby environmental law relies on procedural rights to protect substantive rights that depend on the environment. For example, the procedural right of having access to a court allows a community harmed by illegal dumping to invoke environmental law and obtain a remedy that stops and remediates the dumping, thus protecting the substantive rights to life and a healthy environment.

Courts can also look to substantive constitutional or human rights as a basis for environmental claims and environmentally protective judgments when substantive environmental law is either too weak a

⁸⁰ Pring and Pring 2009, 75.

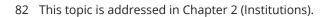
⁸¹ For a discussion of rights related to the environment, please see Chapter 4 (Rights).

basis for a case or simply does not address a matter. The right to water, for example, may be invoked by a court that is addressing a water contamination case if the existing water pollution statute does not address the facts of that particular case (for example, if the particular pollutant is new and not yet regulated) or if the governmental institution responsible for enforcing the statute to bring the case fails to act. In this way, constitutional and human rights law can be invoked by the public as an important complementary basis for protecting vital environmental interests. Moreover, invocation of constitutional law or human rights treaties can elevate the profile and importance of environmental claims.

1.3.7 Specific Criteria for the Interpretation of Environmental Law⁸²

It is important for governments to publish detailed guidance and policy statements that clarify environmental laws and their implementation so that stakeholders understand what is required and expected. Environmental laws are often written in broad terms to provide significant authority and discretion to implementing agencies. This allows for interpretive tailoring of laws to fit changing scientific understanding and circumstances. It is critical, however, that agencies adopt clear, implementable regulations and issue explanatory policy documents so that the regulated community and the public can understand how these laws will be implemented and what will be expected of both the regulated community and the regulators. It is also important that broadly applicable interpretations and regulations be subject to judicial review.

In addition, many countries set enforcement priorities so that certain sectors or industries will experience heightened scrutiny over the course of a year or two. By publicly announcing these priorities, industry is





put on notice to pay particular attention to its compliance activities. Experience suggests sectors increase their overall rates of compliance when they are aware of an impending government initiative.⁸³

1.4 Evolution of Environmental Rule of Law

While environmental rule of law is relatively new terminology, it has rapidly gained prominence, particularly in recent years.

While some countries adopted environmental laws in the 1970s and 1980s, most adopted their framework environmental laws starting in the 1990s, following the Rio Earth Summit.⁸⁴ The 1990s also saw a rapid growth of environmental ministries and agencies.⁸⁵ From 1972 to 1992, nations entered into more than 1,100 environmental agreements and other legal instruments.⁸⁶ International and bilateral donors and partners focused money and

⁸³ See Section 2.6.1 infra.

⁸⁴ See Figure 1.1.

⁸⁵ See Figure 1.2.

⁸⁶ Brown Weiss 2011, 6.

energy in building human and institutional capacity.

By the time the 2002 World Summit on Sustainable Development was held, many countries' wherewithal for making new international commitments at global summits was exhausted. There was a sense among many that the Summit should focus on implementation of existing commitments, rather than on generating yet more commitments that countries may have difficulty implementing. This led to a focus at the Summit on voluntary publicprivate partnerships, which were viewed as not providing a substitute for effective environmental rule of law.⁸⁷

In the early 2000s, the UN Environment Programme led a global initiative to develop guidelines, foster innovation, and build capacity to improve compliance with and enforcement of multilateral environmental agreements.⁸⁸ As many countries adopted environmental laws and regulations through the 1990s and implementation and enforcement lagged, civil society actors started invoking their rights granted under national constitutions and laws and pushing for greater compliance and enforcement of national environmental laws.

By the 2012 UN Conference on Sustainable Development (also known as "Rio+20"), there was substantial focus on environmental governance. *The Future We Want*, the outcome document from Rio+20, emphasized the importance of strong institutions, access to justice and information, and the political will to implement and enforce environmental law.⁸⁹ It also expanded and refined a number of the public-private partnerships and other initiatives initiated at the World Summit on Sustainable Development.⁹⁰ Moreover, the World Congress on Justice, Governance and Law for Environmental Sustainability, held in tandem with Rio+20, emphasized the environmental rule of law,⁹¹ and helped shape the outcome of Rio+20.

Since Rio+20, there has been growing interest in and attention to the environmental rule of law. United Nations Environment Programme's Governing Council Decision 27/9, adopted February 2013 —the first international instrument to use the phrase "environmental rule of law"—calls upon the Executive Director to assist with the "development and implementation of environmental rule of law with attention at all levels to mutually supporting governance features, including information disclosure, public participation, implementable and enforceable laws, and implementation and accountability mechanisms including coordination of roles as well as environmental auditing and criminal, civil and administrative enforcement with timely, impartial and independent dispute resolution."92

The first United Nations Environment Assembly in 2014 adopted resolution 1/13, which calls upon countries "to work for the strengthening of environmental rule of law at the international, regional and national levels."⁹³ And in 2016, the First World Environmental Law Congress, cosponsored by the International Union for Conservation of Nature and UN Environment, adopted the "IUCN World Declaration on the Environmental Rule of Law," which outlines 13 principles to serve as the foundation for developing and implementing solutions for ecologically sustainable development.⁹⁴ It declares that "environmental rule of law

⁸⁷ Bruch and Pendergrass 2003. Following 2002, governments, businesses, and civil society actors increased efforts to implement public-private partnerships that fostered improved environmental governance, to give greater attention to social license, and to track actions and results.

⁸⁸ See, e.g., UNEP 2002; UNEP 2006.

⁸⁹ UN 2012.

⁹⁰ Yang 2012.

 ⁹¹ The declaration from the World Congress on Justice, Governance and Law for Environmental Sustainability attention to the environmental rule of law was informed by Fulton and Benjamin (2011).
 92 UNER 2012, page 5(2)

⁹² UNEP 2013, para. 5(a).

⁹³ UNEP 2014b, para. 4.

⁹⁴ IUCN World Commission on Environmental Law 2016.

should thus serve as the legal foundation for promoting environmental ethics and achieving environmental justice, global ecological integrity, and a sustainable future for all, including for future generations, at local, national, sub-national, regional, and international levels."⁹⁵

In 2015, the global community of nations recognized the importance of environmental rule of law to sustainable development. Sustainable Development Goal 16 emphasizes that environmental rule of law creates peaceful and inclusive societies premised upon access to justice and accountable and inclusive institutions. As such, Goal 16 cuts across all the other Sustainable Development Goals.⁹⁶

Although explicit reference to environmental rule of law may be a relatively recent phenomenon, the elements of environmental rule of law have been gaining momentum ever since modern environmental laws started to be adopted in the early 1970s. These include specific approaches for structuring environmental institutions, engaging the public, ensuring access to justice (in part to complement what was often viewed as irregular enforcement), and development of rights and rights-based approaches in statutes, constitutions, and treaties. The framing of environmental rule of law as a formal concept has drawn upon many of these tried and true tools, integrating them into a holistic framework designed to more fully give force to the environmental laws adopted over the last few decades.

Environmental rule of law is incremental and progresses nonlinearly. There have been numerous victories, as countries across the globe have reduced pollution significantly and returned species from the brink of extinction based upon well-constructed environmental statutes that are implemented by competent, adequately funded agencies. But even countries with highly developed governance systems often struggle, taking some steps forward and some backward as circumstances change.

In fact, environmental rule of law requires constant monitoring, evaluation, and continued shaping as lessons are learned, new environmental challenges arise, and social and political priorities shift. Over time, some environmental governance functions may be more meaningfully assumed by companies with strong compliance cultures, for example through adoption and effectuation of standards of conduct and supply chain expectations, while technological advances now allow citizens to increasingly act as environmental monitors and compliance assessors. Neither of these innovations displaces traditional government functions, but they do create new opportunities and require environmental rule of law to adapt to new methods and mores to most effectively and efficiently ensure environmental outcomes.

Implementation and enforcement depend upon robust laws. Indeed, "some environmental laws are thin in ways that impede effective environmental protection. For example, some laws lack procedures for transparent and science-based standard-setting, concrete implementation mechanisms, provisions for coordination among different parts of government, provisions for judicial review or provisions for monitoring, inspection, civil enforcement, or adequate penalties."⁹⁷ For example, analysis of environmental legislation suggests that implementation of even widely accepted principles like access to environmental information is constrained by gaps in legislation.⁹⁸ And a key reason for limited traction of environmental law in India is that the laws generally do not give the government civil enforcement authority or a range of enforcement sanctions short of shutting-down pollution sources, which is often politically untenable. This gap in the law inhibits effective enforcement.99

⁹⁵ Ibid., 2.

⁹⁶ For further discussion of the Sustainable Development Goals and the environmental rule of law, see Chapter 6 (Future Directions).

⁹⁷ Fulton and Wolfson 2014.

⁹⁸ Excell and Moses 2017

⁹⁹ Pande, Rosenbaum, and Rowe 2015.



It is important to reiterate the importance of ongoing development and improvement to ensure environmental laws are robust, implementable, and enforceable.100 China's response over the past decade to its environmental crisis provides a concrete example. Significant legal reforms enacted between 2008 and 2018 have been a key component of reform efforts that go hand-in-hand with efforts to strengthen enforcement. Prior to this wave of reform, many Chinese environmental laws lacked developed procedural and implementation mechanisms¹⁰¹ and the high-level China State Council noted that "Chinese environmental protection laws and regulations are not up to the task."¹⁰² The Organization for Economic Cooperation and Development (OECD) identified several legal reforms as critical steps for improving environmental governance in China, including making local leaders more accountable to higherlevel government officials, strengthening China's pollutant permitting system, and enhancing legal authorities for market-based instruments like pollutant trading.¹⁰³ China subsequently enacted legislation and issued regulations addressing each of those issues, and has undertaken other legal reforms including expanding standing for public interest environmental litigation and revising penalty provisions to enhance deterrence of violations.¹⁰⁴ At least in part due to these reforms, China is starting to turn the corner on pollution control, and recent statistics show significant pollution reductions.

Countries that are refining their environmental law frameworks have reason for optimism: they have an enhanced opportunity to learn from the experience of those who went before, as legal systems borrow and learn from one another, while also bringing their own perspectives to bear to make improvements. To be successful, efforts to draft effective environmental laws should consider the need for setting realistic environmental goals and taking implementation in manageable stages in order to build confidence in law as an institution, and the importance of adapting legal drafting to the national contexts.¹⁰⁵

Environmental rule of law is particularly challenging in countries affected by armed conflict. Since the end of the Cold War, more than 60 countries have experienced major armed conflict with more than 1,000 battle deaths. Consider, for example, Cambodia, which emerged from decades of war in the early 1990s. It adopted a constitutional mandate that the state protect the environment and natural resources,¹⁰⁶ enacted environmental statutes, including environmental impact assessment requirements,¹⁰⁷ and even created an environmental tribunal.¹⁰⁸ But Cambodia's judicial and administrative systems had

104 Shenkman and Wolfson 2015.

¹⁰⁰ UNEP 2014a.

¹⁰¹ Wang 2007, 170-171.

¹⁰² Decision on Implementation of Scientific

Development and Strengthening on Environmental Protection, <u>http://english.mep.gov.cn/Policies_</u> <u>Regulations/policies/Frameworkp1/200712/</u> <u>t20071227_115531.htm</u>.

¹⁰³ OECD 2007, 3-4.

¹⁰⁵ Bell 1992.

¹⁰⁶ Cambodia Constitution, art. 59.

^{107 1996} Law on Environmental Protection and Natural Resource Management; 1999 Sub-Decree on Environmental Impact Assessment Process.

¹⁰⁸ Baird 2016.



been decimated by war, and the country had very little capacity to translate these legal requirements into environmental actions and protections. As a result, from 1999 to 2003, no environmental impact assessments were conducted despite legal requirements to do so; and from 2004 to 2011, only 110 out of nearly 2,000 projects resulted in an assessment.¹⁰⁹ In 2017, Cambodia ranked 'poor" on the Resource Governance Index, placing 79th out of 89 countries and 14th out of 15 Asian countries.¹¹⁰ Facing the consequences of unrestrained development and protests from communities negatively impacted by resource extraction, Cambodian authorities started to reassess both their environmental law and its implementation. They are now focused on building the capacity of the country's officials and institutions to realize environmental rule of law in order to make the country's development of its vast natural resources sustainable.¹¹¹

Countries that have experienced difficulties historically in achieving environmental progress are increasingly trying to make progress by enhancing environmental rule of law. China experienced significant public tensions arising from repeated instances of development and pollution that reflected an uneven commitment at the local level to protecting public health, the environment, and property rights, resulting in the significant overhaul of its environmental law framework and renewed efforts to build the institutional capacity and create the right incentives to achieve environmental progress.¹¹² And developed countries with well-established programs are also taking steps to strengthen environmental rule of law. Upon reviewing its environmental enforcement scheme, the United Kingdom recognized that it was overly reliant on criminal sanctions and implemented administrative measures for the first time, significantly changing how it implements environmental law and influences compliance behaviors.¹¹³

1.5 Understanding and Addressing the Drivers of Environmental Compliance and Non-Compliance

Since creating a culture of compliance is at the heart of the environmental rule of law, a growing number of countries have been seeking to act on the evolving understanding of why people and institutions comply with environmental laws, and why they do not. There are often economic, institutional, social, and psychological reasons that people choose to comply or not comply with environmental law.

There are many reasons cited for noncompliance.¹¹⁴ The regulated community may not know or understand what is required for compliance. Compliance with environmental laws can be costly. Depending on the context, it may be unlikely that violations would be detected or prosecuted. Even when environmental violations are prosecuted, the penalty may be internalized

114 See, e.g., INECE 2009.

¹⁰⁹ Schulte and Stetser 2014.

¹¹⁰ NRGI 2017.

¹¹¹ See generally Schulte and Stetser 2014.

¹¹² Wübbeke, 2014.

¹¹³ UCL 2018.

as a cost of doing business, and thus prove insufficient to deter violations. When viewing the benefits of noncompliance in relation to the costs of compliance, self-interest can drive noncompliance. From the governmental side, those responsible for environmental issues are often reluctant to include other institutions in implementation and enforcement for fear of giving up power or control. For example, a study in China found that "local government officials are often extremely sensitive to potential intervention by national government authorities," who are seen only to intervene when there has been a "failure."¹¹⁵

Polluters can exploit this fear. A study across Europe found that countries with weak regulatory and auditing frameworks—a symptom and cause of weak rule of law underreported pollution.¹¹⁶ While some countries with strong legal frameworks and a robust rule of law tradition report higher pollution, these are honest reflections that, in real terms, may relate to less than their counterparts' actual pollution.¹¹⁷

Weak environmental institutions foster noncompliance. If institutions are unable to effectively inspect, prosecute, and adjudicate environmental violations, the regulated community may reasonably believe that violations will not be punished. Weak environmental institutions can have more pernicious effects. A failure to have robust environmental institutions can create "a system of broader institutional weakness which can result in corruption"118 that not just threatens the institutions implicated but undermines confidence in the state generally. Corruption and weak environmental institutions create an uncertain investment climate.¹¹⁹ They frequently lead to the decline of a wide range of natural resources and growth of organized crime. For example, illegal wildlife trafficking is a significant source of revenue for organized

crime, with about 350 million plants and animals worth US\$7 to 23 billion sold on the black market every year.¹²⁰ Illegal trade in environmental contraband—including ozone depleting substances, illegal timber and minerals, wildlife, and fisheries—is estimated to be the fourth most lucrative international criminal enterprise, after drug trafficking, counterfeiting, and human trafficking.¹²¹ This would not be possible without widespread corruption, and indeed the United Nations has shown that illegal wildlife trafficking is heavily correlated with corruption.¹²²

Even when environmental law does not affect financial interests, it can nonetheless be difficult to achieve. Rule of law, and so environmental rule of law, is predicated on cooperation between state and citizen. Citizen engagement in monitoring and enforcement "disciplines public agencies" into fulfilling their legal duties, advocates for correction of failures in the law, and generally represents the interest of the people.¹²³ However, many nations do not have a culture or political tradition of such citizen engagement. In those States, engagement with and advocacy against the government remain difficult, even in places with a constitutional commitment to environmental protection and laws favorable to citizen engagement.¹²⁴

Socially and psychologically, it is important to understand that the regulated community is diverse. As illustrated by Figure 1.9, most populations follow a bell curve. Within a particular population, then, some will always comply because that is the "right thing to do"; others will always try to cheat the system; and most will make a calculated decision whether to comply based on whether they believe most people comply with law and that noncompliers will be caught and

¹¹⁵ Ferris and Zhang 2003, 570–571.

¹¹⁶ Ivanova 2011.

¹¹⁷ Ibid., 49-70, 65-66.

¹¹⁸ Kaufmann 2015, 29.

¹¹⁹ Friedberg and Zaimov 1994.

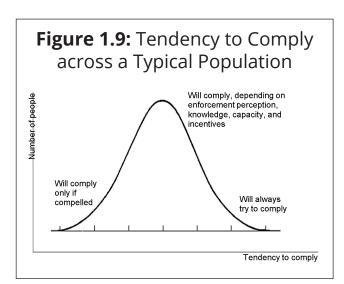
¹²⁰ Goyenechea and Indenbaum 2015.

¹²¹ UNEP and Interpol 2016.

¹²² London Conference on the Illegal Wildlife Trade 2014.

¹²³ Tarlock 2001, 579–80.

¹²⁴ Friedberg and Zaimov 1994, 227.



punished.¹²⁵ Recognizing this, governments increasingly utilize different strategies to target the various groups. There may be awards, priority in bidding on procurement, and tax benefits to those who always comply or go beyond compliance.¹²⁶ Environmental ministries may target persistent violators for more frequent inspection and higher penalties.¹²⁷ Ministries may also publicize the various incentives, awards, prosecutions, and penalties broadly to inform those who are deciding how much effort they want to invest in environmental compliance.¹²⁸

Case Study 1.3: UK Nudge Unit

In 2010, the United Kingdom created the Behavioural Insights Team, known as the Nudge Unit, within the Cabinet Office. Its purpose was to improve government policy and services in a cost-efficient manner by experimenting with behavioral economic techniques so that, according to the Team, people could "make better choices for themselves."^a

The Team experiments with psychological insights to try to change people's and institutions' behavior. For example, the Team increased payment rates of the vehicle excise duty from 40 to 49 percent by adding a picture of the vehicle for which the tax was still owed to letters sent to non-payers. They also found significant increases in on-time tax payments when notices sent to payers mentioned that most people pay their taxes on time.^b This confirms insights drawn from behavioral economics and psychology, and seen in the literature on compliance and enforcement, that people are more likely to comply if they believe their peers are complying and will be detected and punished if they do not comply. Despite the success, however, it is also clear that such "nudges" alone are an insufficient motivator, and that traditional compliance and enforcement techniques remain necessary.^c

In 2014, the Team was privatized as a company with ownership split equally between the government, the charity Nesta, and the Team's employees.

a. <u>http://www.behaviouralinsights.co.uk/about-us/</u>.

b. Service et al. 2014.

c. Rutter 2015.

¹²⁵ See generally Simpson and Rorie 2011; Thornton, Gunningham, and Kagan 2005.

¹²⁶ USEPA 2001, 2004, 2018.

¹²⁷ INECE 2009; Zaelke, Kaniaru, and Kruzikova 2005.

¹²⁸ Zaelke, Kaniaru, and Kruzikova 2005.

Different approaches can capitalize on social and psychological factors influencing compliance. For example, market-based approaches can reduce resistance to traditional regulatory tools, as in the case of States operating emissions trading systems.¹²⁹ And, when environmental rule of law begins to take hold, a positive feedback loop can drive it forward. Investment frequently follows the flourishing of environmental rule of law and its leveling effect in the marketplace, with economic and social benefits that benefit the whole country.¹³⁰ Studies of businesses' behavior demonstrate that if businesses perceive regulations as fair and see that they are enforced, they are more likely to comply.¹³¹

Behavioral psychology and behavioral economics offer innovative approaches to enhancing compliance.¹³² In many instances, noncompliance is influenced by the approach that is adopted; changing that approach can change behavior, improving compliance. As discussed in Case Study 1.3, the United Kingdom created a program to explore whether legal compliance would increase with social cues and encouragements. Scholars have investigated the ability of using social norms to encourage people and companies to engage in desired behavior, such as being more energy-efficient.¹³³ Informing utility users of their energy use relative to their neighbors can modestly reduce energy use for example.¹³⁴ A growing number of institutions are starting to examine how to use these insights into changing environmental behavior in voluntary realms (such as whether to install energy-efficient or water-efficient technologies) may be applied in the context of compliance and enforcement.¹³⁵

- 131 Thornton, Gunningham, and Kagan 2005.
- 132 OECD 2017.
- 133 Vandenbergh 2005.
- 134 Rasul and Hollywood 2012.
- 135 See, e.g., OECD 2017.

1.6 Conclusion

Environmental law and institutions have grown dramatically in the last few decades, but they are still maturing. Environmental laws have taken root around the globe as countries increasingly understand the vital linkages between environment, economic growth, public health, social cohesion, and security. Countries have adopted many implementing regulations and have started to enforce the laws. Too often, though, there remains an implementation gap.

Environmental rule of law seeks to address this gap and align actual practice with the environmental goals and laws on the books. To ensure that environmental law is effective in providing an enabling environment for sustainable development, environmental rule of law needs to be nurtured in a manner that builds strong institutions that engage the public, ensures access to information and justice, protects human rights, and advances true accountability for all environmental actors and decision makers. This Report reviews the key elements of environmental rule of law and highlights the innovative approaches being taken by many States to help it grow on their soil.

There are many important constituent elements to environmental rule of law, and these elements interact in often complex ways. As a result, **environmental rule of law is the result of a dynamic and iterative process** that relies on monitoring and evaluation, revision, and indicators to track progress.

While there are technical and administrative aspects, the human element is essential to environmental rule of law. It is critical to understand how the regulated community, the regulators, and the public understand and approach these issues. Enforcement of law is perhaps the ultimate expression of state political will and seriousness of purpose, and compliance is the strongest indicator of environmental rule of law. Even where compliance is pursued and achieved, it can be difficult to sustain over time without government commitment

¹²⁹ Bell 2003.

¹³⁰ IDLO2014, 23-25.

of resources and capacity, private sector conformance, and near-constant civil society oversight. "Regulatory slippage," which can result from a widespread failure in vigilance or the weakening of the compliance obligation, signals a decay of the notion that "good citizens—and even more so, government officials—obey the law."136 In contrast, when the regulated community sees compliance with environmental law as part of the normal course of business, they adopt a culture of compliance that becomes intolerant of noncompliance and poor environmental performance.¹³⁷ Examples include corporations that choose to meet the most protective mandatory state obligation to which they are subject in all countries or that voluntarily raise their performance bar by meeting more restrictive international standards and voluntary codes of conduct.138

Thus, there are competing dynamics as countries pursue environmental rule of law. On the one hand, governments need to continue working with the private sector and civil society to foster an enduring culture of compliance. At the same time, the political, economic, and social context is continually evolving, and it is necessary to adjust strategies and tools to ensure that environmental rule of law is optimized and remains at steady state.

¹³⁶ Farber 1999, 325.

¹³⁷ Christmann and Taylor 2001, 443.



2. Institutions

Framework environmental laws exist in over 180 countries and are being implemented by hundreds of agencies and ministries worldwide.¹ Institutions translate these laws, directives, and decisions from the legislature, executive branch, and judiciary into action in many ways, such as permits, enforcement, and compliance assistance. Together, laws and institutions are the heart of environmental rule of law.

Ministries and agencies in many countries now have decades of experience with the challenges and opportunities in implementing environmental law. However, while environmental legislation has proliferated at the national level, institutions in many instances are still struggling to implement environmental law effectively, efficiently, and uniformly. These institutions are finding an implementation gap between the laws' goals and actual environmental outcomes.

2.1 Introduction

This chapter reviews the critical role that institutions play in environmental rule of law and the key opportunities for building more effective environmental institutions. In particular, the chapter highlights the need for clear and appropriate mandates; coordinating across sectors and levels of government; developing the capacity of institutions and personnel; collecting, using, and disseminating reliable data; employing independent audit and review mechanisms; ensuring the fair and consistent enforcement of law; and deploying leadership and management skills to empower staff and model behavior. This chapter concludes that *with the proper* mix of capacity, accountability, resources, integrity, and leadership, environmental institutions are poised to greatly narrow the implementation gap in the environmental rule of law.

¹ For more details on framework environmental laws, see discussion in Chapter 1.

2.1.1 Identifying Institutions Involved in Environmental Rule of Law

The overwhelming majority of countries in the world have laws that direct the national environment ministry, agency, or both to implement the core environmental laws. Many other institutions—including multilateral, regional, and national organizations, as well as traditional, indigenous, and local organizations—typically also have jurisdiction over environmental laws or specific natural resource sectors. *Many organizations have considerable influence on the implementation of environmental*

law. For example, a robust response to illegal wildlife trafficking may depend not only on a strong national conservation ministry, but also on strong customs agencies, prosecutors, domestic law enforcement, and courts, supplemented by the cooperation of foreign, regional, and international law enforcement organizations. Provinces and states are often integral partners in enforcing



national environmental laws as well as their own environmental laws. In some cases, active involvement of regional bodies (such as river and lake basin organizations) and local institutions (such as village councils) are also key features of environmental law implementation and enforcement.²

Even institutions not explicitly associated with environmental rule of law—such as finance³ and education ministries—can be crucial to effective environmental rule of law. For example, Samoa's 2016 Strategy for Development from the Ministry of Finance includes environment as one of four priority areas for development,⁴ and New Zealand's Ministry of Education includes "ecological sustainability" as a curricular goal.⁵ Ministries overseeing natural resources, such as fisheries and agriculture, are also critical in implementing environmental rule of law because the activities they oversee implicate many environmental issues, such as water pollution, resource extraction, and land use.

While this chapter's focus is on the national institutions directly responsible for implementing and enforcing environmental laws and policies, multilateral institutions, such as development banks and intergovernmental organizations, also have an important role in supporting and linking national efforts. Many international treaties and regional agreements also contribute to national efforts, and they are discussed in Annex II.

² Singh 2017.

³ See UNEP 2015.

⁴ Independent State of Samoa 2016.

⁵ New Zealand Ministry of Education 2007.

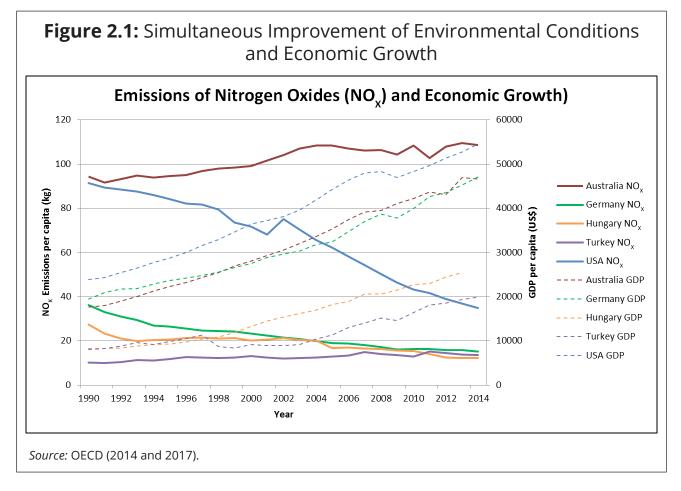


2.1.2 Benefits of Environmental Institutions

Environmental institutions promote environmental progress, sound governance, and social inclusion. Strong and effective institutions are especially important because the benefits of environmental rule of law are diffuse across society, while the costs of weak or ineffective environmental rule of law are often concentrated on vulnerable populations. Environmental rule of law provides benefits such as cleaner air and more sustainable use of natural resources that accrue to all citizens, but that may not be widely recognized or appreciated. Citizens tend to notice environmental problems, such as contaminated water, far more frequently than they notice improvements in environmental conditions, such as fewer days of air pollution. Strong institutions can guantify and communicate these gains by issuing periodic reports on environmental quality and publicizing improvements in environmental metrics, such as the number of days that air meets health standards, to

identify areas that may warrant further action and ensure citizens appreciate the changes delivered by environmental rule of law. It also improves accountability. In contrast, when environmental rule of law is weak and pollution and unsustainable resource use go unchecked, vulnerable populations tend to bear more of the burden. As discussed in the Justice and Human Rights chapters, disadvantaged populations often live with higher levels of pollution and are more frequently displaced by natural resource extraction. Environmental rule of law gives these populations mechanisms by which they can be heard and protect their health, communities, and rights.

As discussed below, effective environmental institutions have three core benefits for the environmental rule of law, which are mutually supporting: they (1) drive sustainable development; (2) provide order and predictability in government decision making; and (3) promote inclusivity and social cohesion.



2.1.2.1 Advancing Sustainable Development

Institutions are key drivers of sustainable development. An extensive body of empirical studies and literature documents the critical importance of strong institutions to growth; in fact, *institutions are the key determinant of economic growth*, more important than trade integration or geographical variables.⁶ Studies estimate that a one-standarddeviation jump in the quality of institutions in a country results in a four- to six-fold increase in per-capita income.⁷ Other research similarly links strong institutions to better development outcomes, including higher per capita incomes (see Figure 2.2).⁸

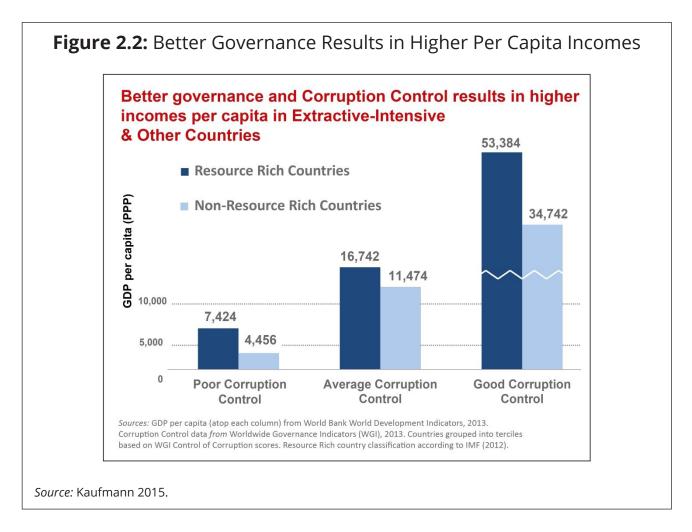
One indicator of the strong ties among environmental rule of law, the strength of institutions, and economic growth is the repeated finding that as economies develop and rule of law strengthens, pollution often decreases. This is counterintuitive because increased economic output would normally be thought to result in increased pollution. Figure 2.1 demonstrates the simultaneous reduction in nitrogen oxide pollution and increase in per capita gross domestic product in several developed economies.

Just as strong institutions can support sustained economic development, weak

⁶ *See, e.g.*, North 1990; North et al. 2008; Acemoglu and Robinson 2012.

⁷ Rodrik, Subramanian, and Trebbi 2002.

⁸ Kaufmann, Kraay, and Zoido-Lobaton 1999.



institutions coupled with abundant natural resources can result in the so-called "resource curse." Numerous studies document that in the last half of the 20th century, economies based predominantly on natural resources tended to develop more slowly than resourcepoor economies. This "curse" cannot be explained by the fluctuation of commodity prices, climate, or other readily-apparent factors. Economists posit that, among other potential causes, weak institutions that allow capture by elites of resources and the proceeds gained from their extraction contribute significantly to this situation.⁹ While poverty has declined sharply in nonresource rich countries and is projected to continue to do so, the number of people living below the poverty line in resource-rich nations remains disproportionately high—around 1 billion people. *Without improved institutions, by 2030 the proportion of the world's poor living in resource-rich nations is expected to rise from 20 percent to 50 percent*.¹⁰ Fortunately, as Figure 2.3 illustrates, there is a correlation between improved governance and enhanced environmental outcomes (in this case, for (a) elephants and (b) rhinoceros).

A broad consensus has emerged that *institutions are also key to addressing*

⁹ Tietenberg and Lewis 2016. For further discussion on the resource curse, see chapter 1.

¹⁰ Kaufmann 2015.

2. Institutions

collective action problems and avoiding the tragedy of the commons, where exploitation of shared resources results in their ruin.¹¹ For example, Case Study 2.1 details the critical role of institutions in addressing overfishing in Namibia and South Africa. The two countries both pursued legal reform; however, the study found that only one country emerged as a "regional success case" due to its emphasis on comprehensively strengthening relevant institutions.¹² Other studies show linkages between institutional failures and higher air and water pollution levels,¹³ decreased population of protected species such as elephants and black rhinos,¹⁴ and lower levels of environmental quality in general.¹⁵

2.1.2.2 Building Legitimacy

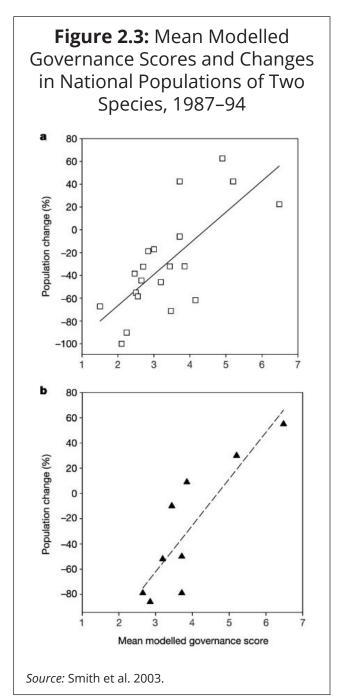
Institutions provide form and process in government decision making that enable the efficient delivery of public services. Provision of basic services, including delivery of water and management of wastewater and solid waste, is a core expectation of any state.¹⁶ A study of 13 countries that managed to achieve significant, sustained growth in per-capita income found that one of the most important factors was a "committed, capable, and credible government."¹⁷ The study noted that all of these governments earned and retained the populace's trust by delivering services and economic results as promised.

Governments best deliver services through strong institutions to build legitimacy in both the institutions and in rule of law.

Public services cost more when delivered by

- 12 Sjöstedt and Sundström 2015.
- 13 Lambsdorff 2005.
- 14 Smith et al. 2003.
- 15 Esty 2002.
- 16 OECD 2010b.
- 17 World Bank 2008.

institutions that are ineffective or corrupt. According to a recent survey from the Anti-Corruption Resource Center, 77 percent of Liberian respondents reported paying bribes for basic public services such as health care, education, and access to government documents. In countries with low corruption



¹¹ *See, e.g.,* Ostrom 1990; Agrawal 2001; Sjöstedt and Sundström 2015.

2. Institutions

Environmental Rule of Law



Case Study 2.1: Role of Institutions in Namibia and South Africa in Ending Overfishing

Namibia and South Africa share many ecological, geographical, and historical characteristics, including the challenge of overfishing. While both countries embarked upon legal reform to address the problem, the authors of one study found that Namibia emerged as a "success case."^a

Namibia quickly established a post-independence administrative body for managing fisheries and policies for long-term management. The study authors point to a number of indications of strong policy enforcement: Namibia has the highest penalties in the world for illegal vessels caught in the country's jurisdiction; a monitoring system described as "effective in preventing illegal fishing to a large extent"; low violation rates; and onboard inspectors who cover 91.5 percent of all seagoing vessels in the country's waters.^b Namibia experienced a 15 percent decline in "overexploited and collapsed" fish stocks over six years.^c

South Africa also put into place administrative and judicial controls on fisheries after the fall of apartheid and initially experienced a decrease in illegal fishing. But within two years, support and funding for these institutions largely ended, and South Africa experienced an 11 percent rise in "overexploited and collapsed" fish stocks over the same six-year period.^d The authors conclude that South Africa faced challenges to putting in place more robust enforcement mechanisms for a number of reasons, including that South Africa had existing institutions in place and interests vested in maintaining those arrangements.^e Additionally, South Africa's abundance of small, geographically-dispersed, artisanal fisheries made monitoring costlier and may have required unique institutional adaptations.^f

The contrast between the two countries' experiences reinforces the finding that strong institutions bolster environmental rule of law and produce real and meaningful environmental benefits.

f. Ibid.

a. Sjöstedt and Sundström 2015, 78.

b. Ibid., 82.

c. Ibid.

d. Ibid., 81.

e. Ibid.

indexes such as Japan, bribery incidence drops to as low as 1 percent.¹⁸ In addition to making services more costly and less available, weak institutions can result in low quality provision of services, imposing larger barriers to access for the poor and other vulnerable groups. As discussed in Section 2.8 below, weak institutions that are beset by corruption are associated with higher levels of pollution and increased public service costs that fall disproportionately on the most vulnerable social groups.

2.1.2.3 Creating Inclusivity and Cohesion

Institutions can foster social inclusion and cohesion through public participation in government processes. Many diverse social and economic interests are at stake when a government body acts on an environmental issue. When a mining permit or forest concession is under review, for example, many different communities, businesses, and government agencies will have an interest, and the reviewing institution often provides an opportunity for public discussion regarding the permit or concession through public comment and review.

Although resolution of environmental issues is often viewed through the lens of conflict, institutional processes that facilitate interactions between interested parties with diverse interests can allow these groups to share their needs, interests, and ideas. For example, environmental impact assessment processes usually require agencies to solicit public input and convene public hearings on proposed projects, which provides an opportunity for parties with different perspectives and interests in the matter under review to listen and be heard. *When a decision is made and adhered to* by the institution and interested groups, it strengthens social and political inclusion, cohesion, and resilience. Studies suggest that institutions that successfully promote the common good in an inclusive manner create security, stability, and a willingness to accept law, all of which are fundamental to establishing and maintaining rule of law.¹⁹

Some scholars, including Nobel Laureate Amartya Sen, argue that social and political inclusion is itself an end. Sen contends, pointing to historical evidence, that giving voice to members of the public within political institutions is an effective means to prevent epic failures of the state, such as famine.²⁰ He also argues that having a voice within the institutions that wield power is a fundamental human need and one that should be pursued alongside the economic goals of development.²¹

2.1.3 Foundations of Effective Institutions: Capacity, Accountability, Integrity, and Leadership

Effective institutions are characterized by their capacity, accountability, integrity, and leadership.

People are the heart of any institution, and institutions are only as capable as their staff. Studies have shown that building institutional capacity entails recruiting talented people and giving them the incentives and tools to perform well.²² Additionally, providing both the staff and the institution with clear mandates helps direct the deployment of

¹⁹ OECD 2010a, 2010b; Roos and Lidström 2014; Ma and Wang 2014; Mallett et al. 2015; Mazurana et al. 2014.

²⁰ Drèze and Sen 1989; Sen 1999a.

²¹ Sen 1992; Sen 1999b.

²² World Bank 2008.

¹⁸ Rose 2015.

institutional resources and staff attention. Capacity requires not just an initial investment in critical personnel, but an ongoing commitment to the training and development of agency staff as well as provision of sufficient resources and sufficient numbers of staff. Without sufficient human capacity, it is not possible for institutions to deliver the environmental results expected of them.

Institutions instilled with integrity and accountability are more effective at delivering enduring sustainable development.²³ Capable institutions can fail and undermine the environmental rule of law if they lack integrity and accountability. Corruption, undue influence from political or economic powers, and failure to account for the interests of under-represented groups (such as youth, women, and indigenous communities) render institutions ineffective.²⁴ Even well-executed and fair decisions can be undermined or sow distrust if they are not transparently documented and do not include an adequate opportunity for stakeholder input and review. Institutions at all levels of governance are strengthened when they are open, well-integrated, and accountable to their constituencies.²⁵ In order to mitigate these potential problems, Germany has instituted a single government service telephone number to improve access to government services and increase accountability. The German federal government is also working to create transparency at all levels of government through its promotion of open data and enhanced e-government as part of its participation in the Open Government Partnership, an initiative launched in 2011 with 75 participating nations.²⁶

While they vary greatly in form, mechanisms to ensure institutional integrity and accountability share common roots of transparency, inclusiveness, and checks and balances to power. Recognizing that each country reflects the uniqueness of its culture and institutions, such mechanisms can include:

- stand-alone bodies, such as anticorruption commissions, courts, legislative oversight committees, ombudsmen, inspectors general, and supreme auditing institutions;
- transparency mechanisms, such as detailed, publicly-available documentation of decisions, public access to the information upon which decisions are based, and whistleblower protection laws; and
- public participation processes, such as widely publicizing proposed decisions and encouragement of stakeholder consultation at many phases of decision making.

These mechanisms are discussed further in the chapters on Civic Engagement and Justice.

Institutions require visionary leaders with integrity to motivate staff to achieve results. Able leaders show political will to effectively address difficulties, use sound management techniques, and model behavior expected from employees.²⁷ If ministers and agency leaders act in these ways, then the institution is much more likely to reflect these traits, to be effective, and to build environmental rule of law with confidence from the public.

²³ Ibid.

²⁴ Welsch 2003.

²⁵ UN General Assembly 2014, para. 82.

²⁶ *See* <u>https://www.opengovpartnership.org/about/</u> <u>about-ogp</u>.

²⁷ Spears 2010.

2.1.4 Challenges to Building Effective Institutions

While the benefits of effective environmental institutions are many, all countries across the spectrum of geography, politics, and development face challenges in building institutions. An institution that is performing well within one context may be ill-equipped to address other contexts: the same conservation ministry that has managed its parks well for years may need to be strengthened to address a surge in illegal wildlife trafficking driven by civil war in a neighboring country, for example. Institution building is a dynamic and ongoing process that must be revisited over time to account for changing contexts.

Compounding this challenge is the reality that institutions are path-dependent, meaning they are constrained by how they were formed and how they developed over time. If a new ministry of the environment is created by combining a pollution control agency with the agency that manages resources, each of the previous agencies is likely to have a discrete set of skills and an organizational culture gained over time. As a result, institutional reform may need to come incrementally and should be tailored to the circumstances and context in which the institution operates.

In developing and emerging market economies, there are additional difficulties to surmount. Too often, institutional reform focuses on making institutions look "modern" by modeling what has worked elsewhere instead of creating institutions that work in that particular context. Scholars have argued that such "isomorphic mimicry" may fail to deliver better institutional performance, and indeed "reform via cut-and-paste from a foreign setting is a capability trap that

inhibits real improvements."²⁸ *Increasingly, best practices emphasize the importance of locally grown institutional reforms that are adapted to the local context.*

For example, in the wake of the 1997 Asian financial crisis, the World Bank and other donor agencies helped establish the Kecamatan Development Project as a means of laying the institutional groundwork to facilitate the growth of a democratic society in Indonesia. Rather than attempting to impose a system borrowed from a foreign context, the project revolved around the use of *kecamatan* councils—local community forums that held historical relevance in Indonesian culture-to promote broader political engagement by empowering villagers to propose and select small-scale development projects through a competitive process.²⁹ And as discussed in Case Study 2.5, beach management units that relied on local citizens for added surveillance augmented fishery enforcement in Tanzania.

Creating institutions that reflect local culture and circumstances presents a challenge as it requires countries to find individual solutions to their particular challenges that work in their unique context while facing real, and often acute, resource constraints. Moreover, where there is a culture of patronage, elite impunity, or exclusion, environmental rule of law requires adopting new approaches often in response to the existing context and history. This chapter explores some of those alternative approaches.

2.1.5 Chapter Roadmap

This chapter reviews the seven key elements in building more effective environmental institutions identified in Figure 2.4.

²⁸ Andrews, Pritchett, and Woolcock 2010, 6.

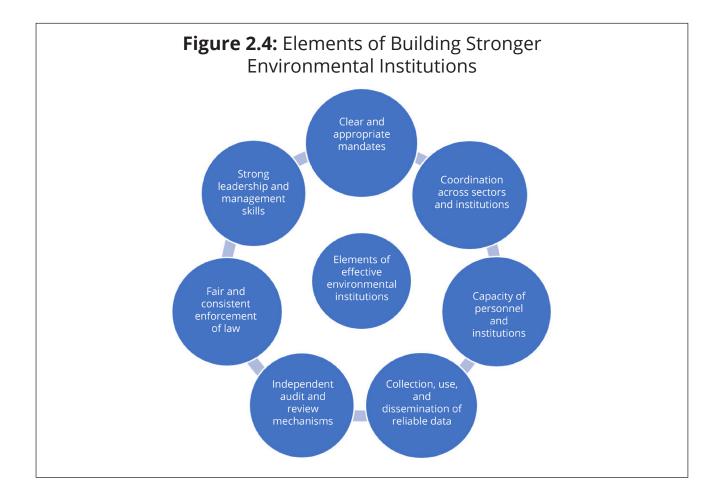
²⁹ Adler et al. 2009.

2.2 Clear and Appropriate Mandates

Clear and appropriate mandates enable institutions to act while ensuring clarity of purpose and accountability. Mandates for environmental institutions are usually provided through laws or executive orders. In ideal situations, the statute or order that creates an institution sets forth clear boundaries for the organization's jurisdiction, details achievable goals in order to focus the organization's efforts, and provides the needed authorities and tools to meet these goals. However, institutions sometimes find themselves without one or more of these elements in their mandates. In addition, often they have to adapt to changing circumstances that their activities and their mandates no longer closely match.

2.2.1 Key Elements of Jurisdiction, Goals, and Authority

Institutional mandates that are straightforward and transparent and that detail an institution's jurisdiction, goals, and authority allow leaders to focus the institution's efforts and allow the public to ensure accountability. Mandates need to be appropriate to the jurisdiction and capacity of the institution, and vice versa, in order to achieve results. For example, many governments are searching for ways to reduce greenhouse gas emissions using existing institutions' legal authorities



and expertise. If the government wants to mandate reduction of greenhouse gas emissions from utilities, this could be done through the energy ministry, the ministry of industry, the environment ministry, or some combination. An examination of the institutions' legal jurisdiction and existing skills in these areas can help determine which institution has the jurisdiction and skills to best fulfill this mandate. The success of a strategy will depend in large part on the ability to align the desired outcome with the ability and authority of the institution charged with achieving the outcome.

Scholars argue that organizational boundaries and specialization are essential to ensure financial and human resources focus on the core institutional missions.³⁰ In other words, it is important that organizations have clearly delineated jurisdictional boundaries that specify the issues they are to take on, oversee, or monitor. In Jamaica, for example, responsibility for implementing multilateral environmental agreements is apportioned among several agencies that have expertise in relevant areas, such as chemicals management or waste management, while the National Resources Conservation Authority has the responsibility for overseeing multilateral environmental agreements not assigned to other agencies.³¹ This ensures clarity of purpose and responsibility for the various agencies.

Environmental issues are often technical and complex, requiring specialized knowledge and skills. *Providing an institution with specific jurisdiction over an issue allows it to invest its resources in a focused manner and to be accountable for results in this area*. For example, many countries rely on dedicated environmental prosecutors to enforce environmental laws. Prosecutors who specialize in environmental enforcement learn the skills necessary to investigate and pursue investigations that may be based upon an in-depth understanding of specialized environmental monitoring and analytical data. Brazil's constitution tasks its public prosecutor's office, or "Ministério Público," with protecting the environment among other responsibilities. Throughout the 1990s and early 2000s, state prosecutors in the São Paolo state alone filed over 3,000 environmental lawsuits. While most federal prosecutors in the country actively work on environmental law, around 100 prosecutors across Brazil's 26 states specialize in the area.³² Spain takes a similar approach with its Environmental Prosecution Network, which was established in 2002 to enhance cooperation, efficiency, and expertise in environmental law among all levels of government. In its "European Union Action to Fight Environmental Crime" study, the European Union found that Spain's 10 percent increase in specialized environmental prosecutors since 2011 significantly contributed to its increased ability to enforce environmental crime.³³

In addition to jurisdictional boundaries, institutions need clear goals toward which they may focus their efforts. Goals allow institutional leaders to benchmark the institution's performance more easily and to focus staff efforts. Bhutan has set a specific goal of retaining 60 percent of its land under forest cover,³⁴ for example, while China sets specific energy intensity, carbon intensity, renewable energy, coal consumption, and forest cover goals every five years.³⁵ The most effective goals are realistic, achievable, and responsive to public needs. Without specific goals, an organization's focus may

34 Constitution of the Kingdom of Bhutan 2008.

³⁰ Wegrich and Štimac 2014.

³¹ UNEP 2006.

³² McAllister 2008.

³³ Fajardo et al. 2015.

³⁵ People's Republic of China 2016.

shift away from the most pressing needs at hand, and its efforts may not meet public and legislative expectations.

It is critical that institutional mandates include sufficient authority to act. Often institutions are assigned an area of responsibility but are not given the necessary authority to act within this area. For example, in 2016, the U.S. Toxic Substances Control Act was reformed in response to broad recognition that the original 1976 law provided the U.S Environmental Protection Agency inadequate regulatory tools for ensuring the safety of chemicals used in consumer and industrial products, even though the agency had responsibility for regulating toxic substances.³⁶ Similarly, many environmental enforcement entities lack the full spectrum of authorities needed to meet compliance objectives. From 2004 to 2008, the Asian Environmental Compliance and Enforcement Network conducted a series of rapid assessments of Member States' environmental compliance and enforcement programs.³⁷ Many of the reviewed programs possessed clear authority to develop policies and guidelines, issue permits, and, to some extent, conduct inspections, but lacked clear or sufficiently comprehensive mechanisms to limit and require monitoring of pollution discharges, file criminal or civil cases, take emergency response actions (such as closing a facility), impose penalties, or order corrective measures. In the absence of an appropriate mandate including well-defined legal tools and implementation mechanisms, agencies often have been reluctant to act or ineffective when they have taken action.

Authority provided to agencies also needs to be clear and unambiguous. Frequently, environmental actions are sidelined by questions over the authority of an institution to act on a specific issue, such as when a statute may exceed the government's authority to act by infringing on property or civil rights or is not clear about the scope of an agency's jurisdiction. For example, significant litigation and regulatory delays have occurred in the United States over the scope of the federal government's authority to regulate greenhouse gases under the Clean Air Act³⁸ and to regulate intrastate waters under the Clean Water Act.³⁹

Often in environmental matters, new threats or issues arise for which no institution has clear authority or jurisdiction. This is especially true for new technologies that are not specifically addressed in existing laws, such as nanotechnology.⁴⁰ Institutions that try to regulate or otherwise intervene without an explicit mandate risk being accused of regulatory overreach while those that do not respond risk being accused of not protecting the environment and public health. Public expectations can be frustrated, as can agency staff, if the authority and resources to act are not available in such instances. For example, as scientists have started to create new organisms in laboratories using so-called "synthetic biology," it is not always apparent what organizations, if any, have a mandate to regulate creation, containment, and disposal of the materials and organisms being created.41

Drones represent a different challenge: they can be used to detect illegal logging, poaching, or dumping of waste, but they also raise potential questions of personal privacy, chain of custody, and evidentiary value. In addressing both the environmental risks and opportunities presented by new technologies,

³⁶ Nel and Malloy 2017, 1016.

³⁷ AECEN 2015.

³⁸ Utility Air Resources Group v. EPA, 134 S.Ct. 2427 (2014).

³⁹ Kennedy and Phillips 2017.

⁴⁰ Reynolds 2001.

⁴¹ Mandel and Marchant 2014, 155.

it is important that the law move with the technologies—and not lag behind.

2.2.2 Identifying Regulatory Overlap and Underlap

Institutions often suffer from regulatory overlap (where mandates are duplicated) and regulatory underlap (where no institution has a mandate to act). Agencies responsible for conservation and tourism may both have overlapping responsibilities for managing wildlife, while no agency may be charged with overseeing trafficking in illegal wildlife products. This often results when organizations are created in an ad hoc manner. At times, existing institutions are given new tasks or responsibilities without clear direction or boundaries between institutions. At other times, new issues may arise for which no institution has specific and concrete authority to act.

A complicating factor for environmental rule of law is that environmental harms cross borders, media, and jurisdictions, implicating multiple institutions at multiple scales. As a result, environmental rule of law may be undermined by regulatory overlap and underlap when no single government or institution has a comprehensive understanding of an issue, much less authority to act. Each organization involved in an environmental issue will be more effective if (1) the issue is well studied to identify regulatory overlap and underlap, (2) the mandates of relevant organizations are coordinated, and (3) accountability for resolution of the environmental issue is assigned.

Efforts to prevent mercury poisoning highlight some of the challenges with regulatory overlap and underlap. Addressing mercury pollution from burning coal to generate electricity involves multiple sectors, environmental media, and jurisdictions. Controlling mercury emissions implicates the type of coal being burned; air emissions of mercury from the utility; transport of airborne mercury for thousands of kilometers; land and water deposition of mercury, often in other countries; biomagnification of mercury in the food chain; and public health threats from inhalation and ingestion of mercury at many points along this path.⁴² Because of the way mercury travels across media (air, water, and land) and jurisdictions, control of mercury emissions is both local in nature (such as airborne mercury pollutions in the local environment) and international (such as impairment of ocean health from mercury contamination). National and subnational institutions involved in natural resource extraction, power generation, air and water pollution, public health protection, fisheries management, as well as international organizations involved in pollution and ocean management, all have a stake in some part of controlling mercury pollution. National agencies must understand the transport



⁴² Driscoll et al. 2013.

of mercury across media and jurisdictions to best calibrate how to reduce exposure to airborne and waterborne mercury from domestic sources and how to approach mercury transported from abroad.

It can be difficult for regulators to be aware of regulatory overlap and underlap when issues cross agencies, geographies, and scales. *In-depth analysis of regulatory scope, jurisdiction, and authorities can help identify overlap and underlap and inform legislative reform and capacity building efforts.*

Environmental performance audits, discussed in Section 2.7, offer valuable methods for conducting such analyses. Regional and international organizations like the Asian Environmental Compliance and Enforcement Network offer significant expertise from peer countries as well as assessment tools.43 Institutions that address common or similar problems can benefit from knowledge sharing with their counterparts in other institutions to compare their understandings about the common problems being addressed and the solutions being used to address them. Such inter-agency consultation can help detect regulatory overlap and underlap. In addition, active involvement of legislative committees and open dialogue with the public, regulated community, and nongovernmental organizations can help assess gaps and overlap in agency mandates. These groups may have a broader perspective on the issues at hand. Analysis of overlap and underlap may suggest remedies such as increased interagency coordination, administrative reorganization, or new or revised legislation. We now consider the potential for coordination to alleviate the problem of overlap and underlap.

2.3 Coordination

Effective and efficient institutions depend upon coordination within and across

institutions and sectors. The authority to regulate a single ecologically-interconnected resource is often fragmented across many institutions, with different and often conflicting mandates. For example, 14 organizations located in Zambia and Zimbabwe have a legal mandate to manage the water resources of Lake Kariba, the Zambezi River (which feeds it), and its tributaries.⁴⁴ In Peru, 18 national institutions played a role in tracking timber chain-of-custody data, and, until efforts were made to map out and coordinate their roles, they each had different and sometimes redundant requirements.⁴⁵

Fragmented jurisdiction can result in duplication of effort and wasted resources; policies that are not mutually reinforcing or even conflicting; obscured lines of responsibility for policy failures; bureaucratic infighting and maneuvering; confusion among stakeholders about who the relevant authority is; and delays in identifying exigencies and implementing responsive measures.⁴⁶

The investigation and prosecution of environment-related crimes—which must align law enforcement capacity, environmental expertise, and prosecutorial authority—often suffer from significant coordination gaps, as shown in Case Study 2.2. A survey of European environmentrelated crime agencies revealed that information sharing across agencies is often prohibited by privacy laws; environmental management agencies are often untrained on evidence collection and handling, which undermines their ability to build a case for prosecution; and many agencies

⁴⁴ Mhlanga, Nyikahadzoi, and Haller 2014.

⁴⁵ Cheung et al. 2014.

⁴⁶ Mhlanga, Nyikahadzoi, and Haller 2014.

⁴³ See http://www.aecen.org/activities.

2. Institutions



simply lacked sufficient personnel and expertise to adequately enforce the laws.⁴⁷ In Cambodia, the Minister of Agriculture blamed the failure to prosecute 70 percent of agriculture, forestry, and fishery crimes on lack of coordination between prosecutors and courts.⁴⁸ There is ample evidence that failure to adopt coordination mechanisms can derail enforcement efforts and result in significant wasted effort and laws not being enforced.⁴⁹ Coordination among institutions provides numerous benefits:

- Coordination is a key method for identifying and addressing regulatory overlap and underlap by helping institutions see beyond their own mission and experience with the help of sister institutions.
- Coordination can improve performance horizontally (among national or sub-national institutions, or among the sub-components of a single institution) as well as vertically (from national to the various subnational entities, and upward as well).⁵⁰
- Coordination reduces bureaucratic infighting by addressing upfront the areas where agencies will operate in tandem or in parallel so that lines of authority are better delineated before conflict arises.
- Coordination makes clear to stakeholders where to seek redress and whom to hold accountable.

Coordination between institutions provides real and important results but can be difficult if policymakers and managers do not make coordination a priority. Often no single agency is tasked with coordinating among agencies, and little credit is given for the results achieved through close coordination. Designating an agency or official responsible for coordination, as Jamaica has done by giving its National Resources Conservation Authority oversight of multilateral environmental agreements, empowers an agency to undertake coordination while also providing a focal point for accountability for lack of coordination.

⁴⁷ Intelligence Project on Environmental Crime 2015.

⁴⁸ Goncalves et al. 2012.

⁴⁹ *See* Intelligence Project on Environmental Crime 2015.

⁵⁰ Wegrich and Štimac 2014.



Case Study 2.2: Lack of Coordination in National Environment-Related Crime Units of Germany and Indonesia

Germany: Traffic Police and Chemical Waste

The German Traffic Police stop and check heavy-goods vehicles using a risk-based targeting approach and regularly find leaking barrels of battery acid or other hazardous substances. Although the waste is temporarily confiscated to address the immediate danger, the case reports are rarely accepted for prosecution by criminal police units or the public prosecutor agency because, as noted by EnviCrimeNet, the incident is not a priority within those institutions.^a The lack of coordination, of consistent priorities across agencies, and of a mandate to target and prioritize such crimes create an enforcement gap.

Indonesia: Satellite Data and Illegal Logging

Indonesia established a satellite mapping program to gather information intended to help improve detection of illegal logging over large areas that are difficult to patrol on a regular basis. However, it was reported that between 2002 and 2003, no legal cases were initiated because the satellite images and analysis of the images were never provided to forest law enforcement or the prosecutor's office.^b Formalizing procedures for the exchange of information is an essential and cost-effective step to promote stronger enforcement.

In both instances, simple increased coordination among agencies could result in significant increases in fighting environment-related crimes.

a. Intelligence Project on Environmental Crime 2015.

b. Goncalves et al. 2012.

2. Institutions

	Strengths	Limitations
Enhancing hierarchical controls	 One institution bringing resources and focus to bear increases results and reduces regulatory underlap Easier to hold institutions accountable 	 Reduces information sharing and responsiveness Risk of abuse and politically determined decisions Less likely to produce comprehensive policies
Promoting collaborative governance	 Organic and dynamic Produces more comprehensive understanding of issues and better solutions 	 Results in competition for power or failure to take responsibility Leaves stakeholders with no clear point of contact Resource intensive

This section reviews various methods and strategies for coordinating across and within institutions, including customary and statutory institutions.

2.3.1 Approaches to Coordination

Coordination has several dimensions to consider: there are hierarchical and collaborative approaches to coordination, and coordination is both horizontal (across sister institutions) and vertical (down a chain of command) in scope. In general, coordination falls into two categories of approach that are outlined in Figure 2.5, both of which have advantages and disadvantages:

 Enhancing hierarchical controls, such as strengthening the monitoring and intervention capacity of a centralized authority or merging fragmented organizational structures; and Promoting collaborative governance through inclusive procedures and mediation across a range of stakeholders.⁵¹

The imposition of controls that rely predominantly on hierarchy can cause one agency to focus on an issue, helping to reduce the chances of regulatory underlap. At the same time, this may displace or disempower the other institutions engaged on the issue. A hierarchical approach can make it more difficult for subunits of agencies and smaller offices to participate in policymaking and for their contributions, such as localized knowledge or specialized expertise, to be heard at the national agency or ministry level. This means the final decision makers may not have the benefit of local and special knowledge that would result in the best decisions. For instance, a fisheries policy made at a ministry level without adequate consultation with local agencies and enforcement officials may not take into account unique aspects of local

⁵¹ Ibid.

fisheries or social dynamics that could affect implementation of the national policies.

Placing authority in the hands of one government unit comes with the risk of abuse and decisions reflecting primarily the concerns of that unit. Using the fisheries example, the national ministry may set policy to drive maximum yield of fish for consumption, while local concerns about overfishing or fishing by nonlocal fisherfolk go unaddressed. In contrast, it may be easier to oversee a centralized decision-making process than one that is more diffuse. Accountability is focused in one place, which allows stakeholders with limited resources to identify the institution that is ultimately responsible.

The collaborative approach to coordination is an alternative that comes in two common forms, as discussed in Figure 2.6. In the first form, the institution with primary responsibility for an issue drafts a policy, and the draft is reviewed by other relevant institutions. Each institution can raise concerns if the policy contradicts one of its existing policies or needs other revisions. For example, the fisheries ministry may draft a policy on excluding nonlocal fisherfolk from local fisheries and circulate the draft policy to police, customs, and immigration officials for their review and comment. This limited form of engagement may reduce policy conflict (for example, by ensuring that fisheries practices do not conflict with customs practices); however, it is unlikely to produce a sufficiently comprehensive policy approach that advances multiple goals (namely, adopting a unified system to manage and prosecute nonlocal fisherfolk) because it leaves each institution to advance its own policy.

An alternative version of the collaborative approach combines the expertise of multiple institutions to work together. Task forces and inter-ministerial working groups are typical examples. This form of **collaboration can produce a vibrant exchange of ideas, creative** new solutions, and meaningful coordination across agencies and sectors. For example, an interagency task force on management and prosecution of illegal fishing by nonlocal fisherfolk could bring a unified approach to a problem touched upon by multiple agencies. Formally structured inter-agency relationships (rather than those created on an ad hoc basis) can enhance effectiveness of this approach; promulgating regulations or entering into memoranda of understanding often provide such efforts with clear mandates.⁵² Another approach is co-management of resources between national and local authoritiesan approach that Kenya took for fisheries management, where a purely national approach had proven unsuccessful.53

Such collaborative mechanisms are complex and will not bear fruit unless there is a real exchange of ideas and a common problemsolving approach. Too often, task forces fail because they are used for political gamesmanship or as vehicles for institutional power struggles.⁵⁴ In addition, competing interests between agencies can make finding common ground difficult, particularly if there is limited political will to forge a common position or approach. In addition, diffuse responsibility may mean that no single agency feels empowered or responsible for ultimately addressing an issue.

Environmental institutions have faced significant coordination issues in part because many environmental ministries were created after 1990, long after water, timber, and other resource ministries were created. It was difficult for some ministries to operate alongside long-established peer ministries, and some struggles resulted over financial and human resources and which ministry would take responsibility for overlapping issues. Over time, some countries created

⁵² Fulton and Benjamin 2011.

⁵³ Bruch et al. 2005.

⁵⁴ Wegrich and Štimac 2014.

2. Institutions

	Strengths	Limitations
Traditional approach (one institution leading and consulting)	 Reduces policy conflict Agency receives benefit of sister agency review and comment 	 Unlikely to produce comprehensive policy approaches Disempowers sister institutions
Pooling of expertise approach	 Synergies produced from interaction of multiple institutions working together 	 Highly complex; requires open exchange of ideas and joint problem-solving
	• Diversity of voices and perspectives more likely reflected in final action	 May be resource intensive and requires ongoing political support

inter-ministerial coordinating councils or commissions responsible for coordinating on environmental issues to address such situations and improve overall coordination. For example, Burkina Faso has the National Council on Environment and Sustainable Development, which is charged with integrating environmental management into national and sectoral development policies as well as providing a framework for interagency coordination and coordination with nongovernmental stakeholders.⁵⁵

In addition to being hierarchical or collaborative, coordination is done both horizontally (among national or sub-national institutions, or among the sub-components of a single institution) and vertically (from national to the various subnational entities as well as from international to national).⁵⁶ Coordination also occurs across or within sectors: protecting species may require horizontal coordination across sectors such as tourism, public lands, international trade, and customs.

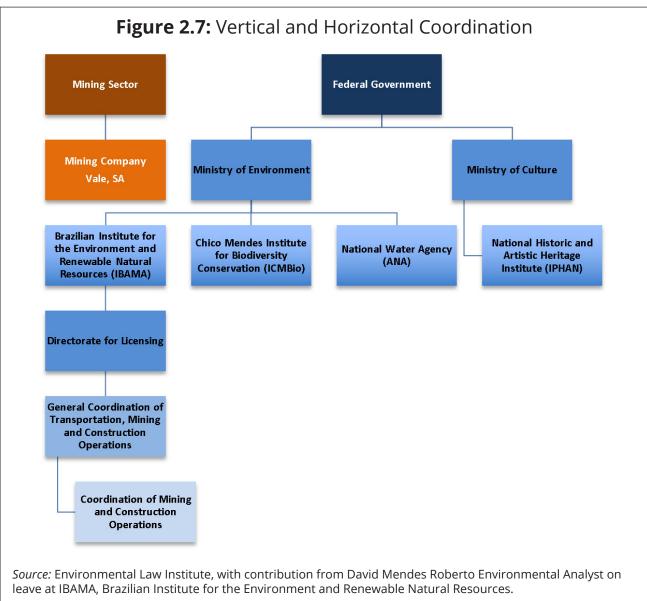
As an example, consider the coordination necessary to address water pollution from mines. Figure 2.7 demonstrates that coordination happens on several planes: across ministries; among several offices within the environmental agency; and between the ministry, national agency, and provincial authorities.

2.3.2 Horizontal Coordination across Institutions and Sectors

There are many examples of horizontal coordination across environmental institutions reflecting differing circumstances globally. As noted above, there is no single coordination approach because of the diversity of contexts and circumstances found in each country. **Coordination across institutions can be** *facilitated by creating a framework for the interagency effort*, such as:

⁵⁵ GNNCSDS n.d.

⁵⁶ Wegrich and Štimac 2014.



Note: The environmental licensing process of the world's largest iron project, Carajas S11D in Brazil,^a which is conducted by the mining company Vale, SA, entailed complex and coordinated steps. IBAMA, one of the main Brazilian environmental agencies, had the legal mandate to issue the license, but it needed reports from other institutions such as ANA and ICMBio because the project included the use of water resources and it is located in a federal area of conservation. IBAMA, ANA and ICMBio are all linked to the Ministry of Environment, illustrating a horizontal coordination. In addition, because the project affects an archaeological and cultural heritage unit, it also needed a report from IPHAN which is linked to the Ministry of Culture. The licensing process itself requires vertical coordination within Ministry of Environment.

a. Engineering & Mining Journal 2012.

2. Institutions

- explicit consensus goals for the activity;
- clear delineation of responsibility for managing the activity, such as designating one participant to be responsible for convening the activity and documenting any results;
- comparable levels of responsibility within their respective organizations for participants; and
- empowerment of participants to act on behalf of their organization.

Examples of coordination range from information sharing to creating formal standing committees to joint investigations and enforcement. In Thailand, for example, enforcement agencies coordinated environmental enforcement efforts through a memorandum of understanding among the relevant agencies. The memorandum of understanding was not enforceable and did not create legal obligations, but it has been helpful for the different agencies to have a common understanding on issues of common interest.⁵⁷ Similarly, agencies in Tanzania join together when conducting environmental inspections so that the collective experience of the agencies can be brought to bear.58

Other countries have created formal institutions for coordination. Since the early 1990s, Mauritius, pursuant to national legislation, has had an Environment Coordination Committee to coordinate the environmental activities of the relevant national agencies. The Committee consists of the minister responsible for the environment, representatives from enforcing agencies, environment liaison officers, the Director of the Department of Environment, and any other public officer designated by the Committee. The Committee is responsible for Many countries assemble coordinating committees for specific cross-cutting environmental issues, such as climate change, desertification, and species protection. In 2014, Serbia created the National Climate Change Committee and appointed the Minister of Agriculture and Environment to lead the Committee. The Committee, comprising representatives from relevant ministries, is charged with monitoring development and implementation of national climate policies and related sectoral policies and proposing ways to ensure consistency of policies with the national climate objectives.⁶⁰

No matter the form it takes, coordination is imperative. As shown in Case Study 2.3, **coordination can directly affect a government's effectiveness.**

2.3.3 Vertical Coordination within Institutions and Sectors

Vertical coordination within institutions and sectors varies widely depending upon local factors such as the degree of centralization or decentralization and whether the government system is unitary (meaning all power flows down from the central government to subunits) or federal (where provincial and state governments may be

a wide range of activities, including developing policies and administrative measures to ensure prompt and effective consultation and information sharing; advising the minister and the National Environmental Commission to avoid duplication of functions and ensure proper enforcement; and generally fostering cooperation and coordination among agencies.⁵⁹

⁵⁷ UNEP 2014a.

⁵⁸ Ibid.

⁵⁹ UNEP 2006.

⁶⁰ UNDP-GEF 2015.



Case Study 2.3: Joining Forces to Prosecute Illegal Logging ... or Not

Virachey National Park is one of Cambodia's pristine conservation areas and one of only two Association of South East Asian Nations Heritage Parks in Cambodia. Despite being isolated and largely unexplored, it has also been plagued by illegal logging for decades.

After significant damage from illegal logging was discovered by the World Bank and global nongovernmental organizations in 2004, Cambodian agencies mounted a concerted effort to prosecute illegal loggers with international assistance. The Ministry of Forestry and Ministry of Environment, which were responsible for forests, collaborated formally and informally with the Ministries of Interior, Justice, and Defense. In addition, Cambodian officials enlisted the assistance of peers in Laos and Viet Nam. In the end, 11 police officers and government officials were convicted and sentenced to five years in prison. In addition, seven officials, including the governor of one of the largest provinces in Cambodia, were each sentenced in absentia to six to seven years in jail.

But in 2008, the World Bank and major international nongovernmental organizations pulled out of the Virachey effort. Since then, illegal logging has reached new heights, according to local press reports and several reports by international nongovernmental organizations that portray an active logging business that exports logs from the Park to neighboring Viet Nam.^a When asked by reporters about illegal logging in the park, officials at the ministries in the capital, Phnom Penh, said it was a minor, sporadic problem or referred reporters to the provincial authorities and police, saying illegal logging was a local responsibility. The provincial police chief in turn said his officers only get involved when asked by the Forestry Department to intervene. In other words, interagency cooperation and lines of authority appear to have seriously degraded across agencies. According to research published in the journal *Science* in 2013, Cambodia experienced the fifth fastest rate of deforestation in the world in the previous 12 years.^b

a. CHRTF 2015; Zsombor and Aun 2013; Global Witness 2015.

b. Zsombor and Aun 2013; Goncalves et al. 2012.

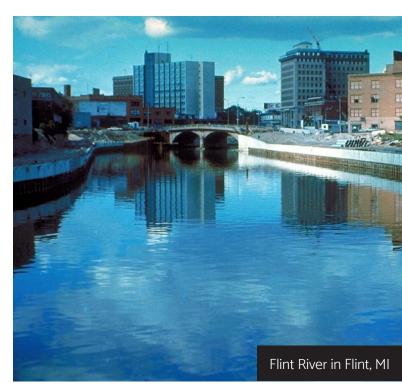
2. Institutions

largely co-equal to and regulate in parallel with the national government).⁶¹

Coordination within institutions is vital to ensure that information gathered in one office, such as permitting or inspections, is relayed to and acted upon by other offices, such as enforcement and regulatory *development.* Larger countries frequently tinker with the allocation of powers and responsibilities between national, state/ provincial, and local governments. In China, for example, the [unitary] national government has experimented both with devolving more power to provincial authorities and with developing new methods for coordinating between the subunits and with the national level. This approach seeks to develop an effective balance between local control and alignment with national goals.62

Governments often find benefits and risks in devolving power. Having a national agency responsible for permitting, for example, can help ensure consistency in permitting and enforcement across the country, which might not occur if provinces or municipalities issued permits. By contrast, local officials and stakeholders may not accept decrees issued from a distant national capital that they feel do not reflect local concerns and practices and may be more vulnerable to being influenced by local industry and economic interests. Indeed, many countries emerging from conflict have adopted, as a peacebuilding strategy, provisions in their constitutions that devolve or decentralize authority over natural resources and other issues.63 Close oversight and coordination by national officials can address many of the potential risks in devolving power to subunits. As demonstrated in Case Study 2.4, failure of governmental units to coordinate and to hold each other accountable can be disastrous.

Despite the risks, devolving authority and power to subunits can result in better outcomes. As described in Case Study 2.5, vertical coordination using local beach management units in Tanzania allowed closer coordination with stakeholders directly involved in resource management to improve environmental results.



2.3.4 Coordination of Statutory and Customary Institutions

In many countries, more than one set of laws may apply—a governance arrangement known as legal pluralism. Laws can be statutes adopted by legislatures, customary laws from traditional authorities, religious laws from religious authorities, and other types of law. Customary laws have force formally or informally in many places, often reflecting the intersection of indigenous laws

⁶¹ Capano et al. 2012; Manglik et al. 2010.

⁶² Ibid., 7.

⁶³ Bruch et al. 2017.

Case Study 2.4: Poisonous Water in Flint, Michigan, United States

In 2016, then-U.S. President Barack Obama declared a state of emergency in the city of Flint, Michigan. For years, city residents had been drinking water with dangerously elevated levels of lead, which is hazardous to all and can cause serious neurological damage to children.^a

In order to save money, Flint switched its water source from the nearby city of Detroit to a local river. Agents of each responsible institution failed to investigate subsequent clear signals of trouble with local water quality. The new water source had higher corrosiveness, which caused lead from the pipes to leach into the water supply. Local officials failed to test the water in homes in order to monitor lead levels. The Michigan Department of Environmental Quality failed to follow its own protocols to investigate the issue. The U.S. Environmental Protection Agency, which issued a memo outlining the corrosiveness problem, informed local officials that it was a draft memo and did not push aggressively for more investigation. The Michigan Department of Health and Human Services prepared and then dismissed a report revealing higher-than-usual lead levels in the blood of children who lived in Flint.

It was only when a local medical center reported double the number of children with high levels of lead in their blood that public attention caused a regulatory response. A panel subsequently issued a report concluding that state officials were "fundamentally accountable' for the lead contamination of Flint's water supply."^b This example illustrates the fact that even if several institutions detect a problem, without coordination and clear accountability action may not be taken to address the problem.

a. DeLaney 2016.

and institutions with statutory laws brought by colonizing powers.⁶⁴

Legal pluralism is particularly important in environmental rule of law because many indigenous communities have complex traditional legal systems and customs governing natural resources important for livelihoods and food security, such as water, forests, land, and fisheries. In rural areas in many countries, customary and religious legal systems enjoy greater legitimacy than statutory law, and a growing number of countries recognize this in their constitutions and environmental laws.⁶⁵ Religious laws can also help normalize and implement traditional environmental protection concepts. Islam, for example, has strong principles regarding prevention of waste and minimization of harm that can be incorporated into statutory provisions or referenced in customary law settings.⁶⁶ The ways in which statutory and customary laws interact are outlined in Figure 2.8.

b. McWhirter 2016.

⁶⁵ Meinzen-Dick and Nkonya 2007.

⁶⁶ Ahmad and Bruch 2002.

⁶⁴ Fajardo 2004.

Case Study 2.5: Using Local Beach Management Units in Tanzania

With support from the World Bank, the Tanzanian government created local beach management units to improve local fisheries management. The project's goal was to stop detrimental fishing practices, such as using poison or dynamite, by increasing community involvement in surveillance and management of the fisheries. The local beach management unit members were not deputized or given legal powers, but identified suspects to enforcement agencies.

According to local fishery managers, these efforts have reduced illegal fishing practices such as using poison and dynamite. Studies also suggest that some local fisheries have improved. Researchers posit that this may be attributable to fisherfolk learning from each other through the local beach management unit process.^a Thus, coordination with local communities can simultaneously improve enforcement and resource outcomes.

a. Eggert and Lokina 2010.

Legal pluralism can be critically important in extending governance authority in fragile and conflict-affected settings, engaging traditional institutions, and linking to statutory regimes.⁶⁷ *Reliance upon customary institutions can enhance both management and enforcement*, which a national government may be unable to provide given limited resources.⁶⁸

In newly independent Timor-Leste, for example, the new government relied upon traditional leaders and practices to manage natural resources by explicitly embracing the customary approaches and underwriting certain program expenses. This approach allowed natural resources to be managed in a way that maintained customary institutions respected by local people, gradually built legitimacy of state institutions, and ultimately enhanced the overall environmental rule of law.⁶⁹

Ensuring fair and just coordination between customary and statutory institutions is critical to ensuring environmental rule of law.⁷⁰

Studies of the interaction between these two systems in managing resources have noted that allowing customary and statutory law to apply in tandem can create uncertainty and different expectations in different communities.⁷¹

It is critically important to articulate clearly how the bodies of law relate to one another and which law applies under which circumstances. In addition, when statutory law incorporates customary rights over a resource, indigenous communities may still be at a disadvantage. Such communities are often unfamiliar with statutory law and lack ready access to the experts and courts that implement and enforce statutory law. As such, indigenous communities may not be able to use the statutory system effectively to defend or exercise their rights.

⁶⁷ Meinzen-Dick and Pradhan 2016; Unruh and Williams 2013

⁶⁸ Meinzen-Dick and Pradhan 2016.

⁶⁹ Meinzen-Dick and Pradhan 2002; Miyazawa 2013.

⁷⁰ Mapaure 2009.

⁷¹ Meinzen-Dick and Pradhan 2002.

Figure 2.8: Intersections of Customary and Statutory Law		
Laws operate in parallel	Customary laws and institutions may operate in parallel to statutory law, such as when indigenous communities have their own legal systems that operate in conjunction with the national constitutional system. For example, indigenous governments may implement national environmental laws on tribal land.	
Laws operate separately	Customary laws may operate in lieu of statutory law when certain groups remain sovereign or when there is a policy choice to embrace customary law. Land owned by indigenous people may be governed by customary law, for example, and be exempt from national statutes.	
Statutory incorporates customary	National laws may incorporate the customary laws of indigenous communities and reflect their practices. Often statutory water laws incorporate traditional practices of communities toward the right to own or use water.	
Customary has targeted application	Customary law may apply only to certain groups or resources within a country, such as Shari'a law applying in some countries to adjudicate issues within Muslim communities or tribal law governing indigenous peoples' right to fish.	

Legal pluralism offers a chance to integrate traditional legal approaches with statutory approaches in an effort to draw upon the best practices of both approaches. Many scholars have noted that it is important for statutory institutions to provide oversight in the implementation of environmental laws by customary institutions to guard against discrimination against women, minorities, and disadvantaged populations.⁷² These challenges can be addressed, though, and the strong weight of scholarship favors legal pluralism.

2.4 Capacity Development

Even the best written law or most carefully organized institution will not be effective without staff who have the necessary training and incentives to implement the institution's mandate. Staff shape the institutions in which they work, and the public and stakeholders often see staff as synonymous with the institution itself. Capacity gaps in institutions can erode confidence in the institution and undermine its decisions. Moreover, institutional capacity can be critical to effective legislation and implementation.

The vital link between developing the capacity of staff and institutions and achieving sustainable development was recognized at the 1992 United Nations Conference on Environment and Development, which

2. Institutions

found that "the ability of a country to follow sustainable development paths is determined to a large extent by the capacity of its people and its institutions"⁷³

This conclusion was reiterated 20 years later at the United Nations Conference on Sustainable Development, which emphasized "the importance of human resource development, including training, the exchange of experiences and expertise, knowledge transfer and technical assistance for capacity-building" in meeting Sustainable Development Goals.⁷⁴

Human capacity is reflected in a variety of ways: subject area knowledge, technical skills, managerial skills, diligence, professionalism, ability to interact with stakeholders, critical thinking, and many other aspects of working to meet institutional goals. A skilled and professional staff can be developed through several common-sense measures detailed below.

Publishing clear and specific skillsets for each position within an institution helps to ensure that staff who are hired have the abilities and training necessary to effectively carry out their responsibilities. It also allows managers to identify potential overlap between positions and to set clear expectations with employees regarding their duties. For example, a position description for an environmental inspector might set forth the necessary investigative skills and technical capacities needed for an inspector to adequately examine, manage, and understand highly technical data, while also detailing the inspector's areas of responsibility, such as conducting field inspections and writing reports that can support enforcement actions brought by prosecutors.

Developing new skills in staff is also critical to meet the needs of environmental institutions.

Providing in-depth training for staff can be a significant commitment of resources; some countries (such as Ecuador) provide funding for higher education and in-depth training in exchange for a commitment by staff to return to the agency for a minimum amount of time after the training is complete.⁷⁵

Many countries rely on secondment of staff between agencies and between countries to leverage existing skills in other agencies and help develop skills. Bringing in experienced staff from other countries to work side-byside with in-country staff can help build capacity. Several programs, like the European Union's Research and Innovation Staff Exchange, provide for exchange of staff between nations.

Once staff have obtained the necessary abilities, ongoing training allows staff to stay current in their required skills, learn general management skills, and stay abreast of new developments in their field of expertise. Institutions can lose public confidence if staff are not kept current on new issues in their field and new ways of accomplishing their duties. Staff training and development are sometimes portrayed as a diversion of scare resources, but without them, staff capacity, efficiency, and morale suffer and undermine institutional performance. As shown in Case Study 2.6, even the most capable institutional actors cannot perform their duties without adequate training.

An integral part of capacity for staff is the availability of adequate financial and technical resources for staff to accomplish their tasks. Having access to computers, software, internet, vehicles, office supplies, and other tools to perform their tasks is critical for staff to undertake their responsibilities.

Opportunities for staff to know and work with peers in other institutions increase

⁷³ United Nations Sustainable Development 1992, para 37.1.

⁷⁴ United Nations 2012, para. 277.

⁷⁵ Pearson 2012.

coordination and knowledge sharing. As noted in the discussion of coordination above, staff can greatly increase their understanding of their field when they interact with peers in other agencies and institutions who may see different aspects of the same issue. Creating inter-agency working groups to address areas of common concern can facilitate the exchange of skills and knowledge and result in better coordination. For example, staff who meet with peers through an inter-agency commission on climate adaptation may learn from the experience of their peers and peer agencies on climate issues. Such meetings and interactions are valuable investments in program outcomes.

Staff capacity is the cornerstone of strong institutions necessary for environmental rule of law. Investing in staff skills through ongoing training also enhances team spirit within an institution, which attracts the most qualified candidates and encourages employee loyalty. In turn, building human capacity creates a respected and admired workforce, which strengthens confidence in government overall.

2.5 Information Collection, Management, and Use

Environmental rule of law is predicated upon accurate, reliable, and readily-available information and data. A core function of institutions is to collect, manage, and use data using standards and methods that ensure the accuracy, reliability, and availability of the information. Agencies use data to determine what should be regulated and how to determine whether the regulated community is in compliance. For example, setting standards for pollution control requires an accurate understanding of the risks posed by the compounds at issue, and enforcing these standards requires reliable emissions data from regulated facilities. Similarly, publicizing enforcement actions can cause others to comply, which helps a culture of compliance to take root. Thus, the use and exchange of data and information underlie many elements of the environmental rule of law.

Failure to ensure data are sound can result in poor regulations and ineffective implementation. For example, Australia adopted a water reform framework in 1994 that sought to (1) increase the efficiency of water allocation and (2) match price with actual cost. However, a new initiative was introduced only ten years later to address issues left unresolved by the initial framework. The lack of progress was largely due to vague and poorly understood environmental costs and benefits, and this was aggravated by the fact that the public was not involved in initial debates on the reform. Further, lack of consensus on sustainable levels of water withdrawal led to ineffective implementation, resulting in challenges to the policy based on its questionable scientific foundation.⁷⁶

Basing decisions on sound data allows institutions to explain their decisions and enhance public understanding. To accomplish this, the data used by agencies should be *made available transparently*. Public access to environmental information can help the public understand environmental issues, track the performance of the agency and regulated community, and even see changes in environmental quality.⁷⁷ For example, when an agency attempts to reduce water pollution, making available information on the baseline water quality, the changes in water quality over time, and the enforcement actions taken with regard to water discharges can help the public understand the progress being made, or not made, with regard to pollution.

Identifying what information should be collected, and how it should be managed

⁷⁶ OECD 2012.

⁷⁷ This is examined in more detail in Chapter 3.

Case Study 2.6: Judicial Education in Uganda

Many judges in Uganda attended law school or took office before environmental laws were enacted. When environmental cases started to be filed, some judges were unfamiliar with the new laws and most did not have copies of the relevant statutes. Many cases languished without being heard.

A national judicial education program—led by Green Advocates, a Ugandan nongovernmental organization, with support from the Environmental Law Institute and UN Environment—allowed judges to become familiar with this new area of law. Judges from other countries as well as subject matter experts taught the courses. The peerto-peer exchange, as well as giving judges copies of Ugandan laws and decisions from sister courts, helped to significantly increase the number of environmental cases heard and decided in Uganda.

When the course started in 2001, each judge received a binder of cases. There was only one Ugandan case (which was included); so, most of the binder included cases from Kenya, Tanzania, India, Philippines, the United States, and other jurisdictions. Over five years, every judge and magistrate in Uganda was trained, and as judges became more familiar with Ugandan statutes and case law from other jurisdictions, they started deciding cases. By the end of the training, there were two binders: the original binder of cases from other jurisdictions, and a new binder of Ugandan environmental cases.

Thus, providing training and education empowered staff and institutions to enact and expand environmental rule of law.

and used, is itself a significant action. The gathering of information about a substance, practice, or resource shines light on the area and invites scrutiny by regulators and stakeholders. Information collection, however, requires the commitment of resources, particularly if data need be collected over significant time spans to be meaningful. In contrast, failing to collect information may mean certain risks or impacts will go unnoticed by institutions, perhaps endangering public well-being. Information collection and management should therefore be consistent with an agency's primary goals and should directly support the agency's priorities.

Similarly, *determining which institution (or institutions) should collect, manage, and use information is an important decision.* The

skills and reliability of the institution tasked with information collection and management should match the task put before it: the mining ministry may have little expertise in collecting ambient air samples outside of mines, while the environment ministry may have air monitoring expertise, even if it has not yet done so for mines. At other times, regulated entities may be tasked with submitting data, which can raise concerns about trade secrets and information reliability.

Some countries have opted to centralize environmental data collection and management in one independent agency or in one office within an agency, as with the Italian Ministry of Environment's reliance on data from the Institute for Environmental Protection and Research.⁷⁸

This allows the agencies and offices that use the information to be free from the duties associated with the information collection and management, and it centralizes expertise regarding information collection and management. Other countries have opted to have front-line offices that use data also be responsible for collecting and maintaining the information. This is often because specific expertise regarding the resource or industry is housed in the office. For example, the United States Environmental Protection Agency collects its own chemical testing data to aid in its regulation of the Toxic Substances Control Act.⁷⁹

2.5.1 Information Collection

Often the very act of collecting information about an environmental issue can change behavior. When regulators have required those who emit or dispose of pollutants to report their emissions and disposal data, dramatic decreases in emissions and disposals have been recorded. For example, when the Monsanto Corporation first reported, as required under the U.S. Emergency Planning and Community Right-to-Know Act, that its plants released more than 370 million pounds (more than 165 million kg) of toxic substances to the environment, the head of Monsanto expressed surprise and pledged dramatic cuts to emissions.⁸⁰ Information collection also helps to identify risks that should be addressed and verify whether environmental conditions are improving.

Institutions rely on information that may be generated by the institution itself, scientific organizations, the regulated community, the public, and other institutions. For example, many sectors in many countries self-report their compliance data to agencies—the agency itself plays no role in the gathering of data (although it may check self-reporting and prosecute falsified data where found). In other instances, a wildlife management agency (for example) may rely on wildlife studies conducted by university researchers or on information gathered informally by wildlife specialists, local communities, or tourism operators. Increasingly, agencies are finding ways to use data collected by citizens—often referred to as citizen science—to make decisions and identify violations.⁸¹

It is vital to have confidence in the quality of the data being relied upon by an agency.

Clear data quality guidelines can improve the collection and generation of useful, sound data sets that meet minimum quality assurance standards. These guidelines allow other stakeholders to understand how the data were collected to ensure reliability and suitability of the data to the purpose for which they are to be used.

For example, the Canadian province of Alberta required certain regulated entities to submit greenhouse gas emission compliance data that were verified by third-party accountants or engineers.⁸² Upon review of the submissions, provincial authorities identified numerous inconsistencies in interpreting verification requirements between firms and across disciplines. Greenhouse gas emissions calculation methods varied widely across industries, and accountants tended to use different methods than engineers. To address this, Alberta authorities convened a task force of stakeholders to produce a technical guidance that set forth common standards for auditing and disclosures. This allowed the reporting community and

⁷⁸ European Environment Agency 2017.

⁷⁹ USEPA 2018.

⁸⁰ Percival et al. 1992.

⁸¹ Dickinson, Zuckerberg, and Bonter 2010.

⁸² Kuhn and Schuh 2013.

auditing professionals the flexibility needed while providing sufficient uniformity to assure comparability of data across sectors.

Just as standardized data collection procedures are critical, so are uniform data reporting forms, formats, and methods. If data are reported in a variety of formats and units, then it is difficult for other institutions and the public to access and assess the information. The data may not yield useful comparisons to regulatory standards, between facilities, and across sectors. Standardization of reporting formats greatly increases institutional efficiency by avoiding the need for tedious translation across systems or conversion into another format, such as moving data from spreadsheets to databases or from paper documents to an electronic database.

Because information use is the basis of many environmental decisions, it is important that the information be verifiable and that the manner in which it was collected be carefully documented. This allows stakeholders to have confidence in the data, or challenge potential inaccuracies, and for reviewing courts to ensure that the data are sufficient to meet courts' evidentiary standards. Courts may require a showing that the information is reliable and has been managed so as to retain its accuracy—that it was not subject to manipulation or alteration.

Many countries require use of specific data collection and reporting protocols by agencies and the regulated community. Countries also provide individual criminal penalties for submission of false or inaccurate information (perjury, fraud, and misrepresentation) in order to ensure data integrity.⁸³ In order to be enforceable, the reporting protocols must be sufficiently detailed that the regulated community has clarity on how to comply. Agencies increasingly rely on electronic reporting of data to avoid many of the pitfalls outlined above. Some agencies request data be submitted using a specific electronic format, such as an Excel spreadsheet, while others create an online portal through which data can be submitted directly and securely to the agency. For example, after 40 years of relying on paper reports, the U.S. Environmental Protection Agency and States are moving to submission of discharge monitoring reports for water pollution via secure, online portals.⁸⁴ Many agencies believe that moving to electronic reporting will improve data quality and decrease the staff time and resources devoted to data management.

2.5.2 Information Management

Information that is used for rulemaking and enforcement purposes should be available to the public in an easy and transparent manner. If information is not readily available, it can undercut public confidence in the reliability of the government decision or action. In addition, the laws, regulations, cases, and policy documents upon which agencies and courts rely and with which regulated entities are expected to comply must also be easily accessible. It is often difficult for stakeholders to access these documents, which undercuts the rule of law by making the law difficult to understand and to comply with. One remedy for this problem is ECOLEX, discussed in Case Study 2.7. Another example is InforMEA, an integrated information system hosted by UN Environment that allows parties and the public to access harmonized information about multilateral environmental agreements.85

Although environmental information should be accessible, environmental information that is confidential or privileged has to be protected.

⁸⁴ U.S. Environmental Protection Agency 2015.

⁸⁵ See <u>https://www.informea.org/</u>.

⁸³ Reitze and Hoffman 1995.

Environmental agencies have systems in place to protect information that should not be disclosed to the public. Some environmental information may be exempt from disclosure because it contains information about vital public infrastructure, such as water supply systems, contains sensitive personally identifiable information, or contains information deemed confidential business information under relevant law. Procedures to ensure that critical information is not disclosed can enhance regulated community willingness to submit business information that may contain trade secrets. Many countries interpret these exceptions narrowly to avoid overly broad claims of confidentiality.⁸⁶

A clear set of criteria can provide a consistent framework for determining whether information is public information, confidential business information, or otherwise protected by law from disclosure. Freedom of information laws often contain detailed criteria and procedures for claiming information as confidential and for challenging such claims, including administrative mechanisms to review such claims. In general, information is presumed to be publicly available unless explicitly protected from disclosure. For example, such laws generally treat information on pollution levels and releases as subject to public disclosure, even if release of this information might embarrass companies or government officials. To be exempted from disclosure requirements, business and trade information usually must be shown to have independent economic value because it is secret and not discernable through other means.

Information management that is coordinated across agencies and other institutions helps to avoid duplicative collection of information. Governments can enact policies to require inter-agency sharing of information to maximize coordination and efficiencies and to help avoid bureaucratic infighting over information. In addition, coordination of the technical specifications of information management systems across agencies eases information management within and across institutions. Some options are adopting consistent information management platforms (such as the same software system) and agreeing to a common set of identifiers (such as using one identification number for the same facility across agencies and media). If each agency manages information using proprietary systems, it can be difficult or impossible to share, integrate, or correlate data. For instance, if facilities or companies are identified using a variety of different names or addresses, agencies may not notice that a particular facility or company is repeatedly violating the laws managed by different agencies.

The use of inter-agency working groups, ministry-level policies, or cross-ministry institutions may help ensure efficient data management. For example, at the request of g7+ (a group of conflict-affected countries), UN Environment, the World Bank, and GRID-Geneva teamed to create Map-X, Mapping and Assessing the Performance of Extractive Industries.⁸⁷ This geospatial data platform provides open and free access to financial, environmental, and social information about timber, mining, and agricultural concessions on a single open-source platform. The maps show multiple layers of environmental, social, and economic data, including areas of environmental degradation, natural resource concessions, and conflict. The geographic location of protected areas and indigenous lands can be shown, for example, to highlight places where natural resource concessions might be problematic. The system allows both in-depth examination of a single concession as well as cross-sectoral

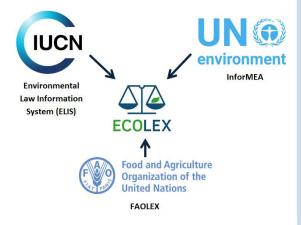
⁸⁷ See <u>https://www.mapx.io/</u>.

Case Study 2.7: ECOLEX

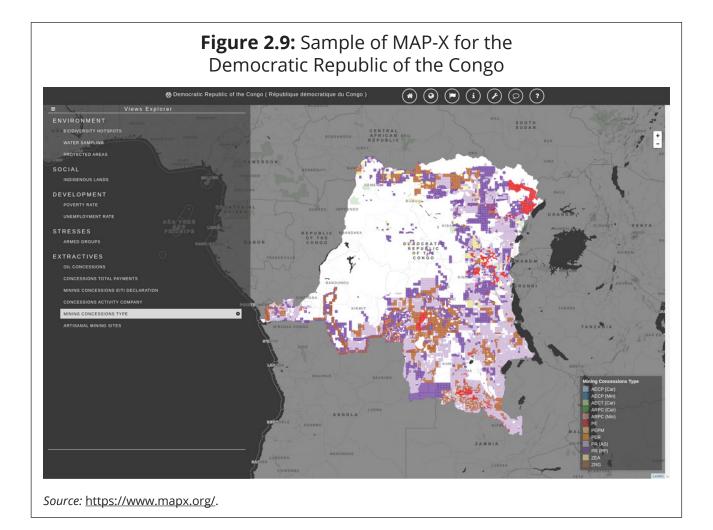
ECOLEX (www.ecolex.org) is an information service on environmental law, operated jointly by the UN Food and Agriculture Organization, the International Union for the Conservation of Nature, and UN Environment. Its purpose is to build capacity worldwide by providing a comprehensive global source of information on environmental law free of charge to everyone. It was created in response to two issues: first, there is limited knowledge about the existence and location of environmental laws; and second, even when this information is available, access is limited. This is particularly the case in developing countries and countries with economies in transition, where government officials, practitioners, environmental managers, non-profit institutions, and academia lack easy access to the legal information they need for developing the necessary legal tools to promote environmental management.

The International Union for Conservation of Nature's Environmental Law Centre created a pioneering, comprehensive information system of environmental law in the 1960s, which was showcased for the first time at the United Nations Conference on the Human Environment in Stockholm, Sweden, in 1972. This system evolved into a large set of references to treaties, national legislation, soft law, and legal literature linked to documents collected by the Environmental Law Centre. In 2001, the International Union for the Conservation of Nature, UN Environment, and the UN Food and Agriculture Organization signed a partnership Agreement to integrate their data. The result was ECOLEX. ECOLEX was designed to be the most comprehensive global source of information on national and international environmental and natural resources law. Today, it includes materials from over 180 countries, including 2,100 multilateral and bilateral environmental treaties, 113,000 national legal instruments, 1,500 court decisions, 10,000 decisions by treaty governing bodies, and 37,000 bibliographic references to the law and policy literature. ECOLEX makes environmental legal information accessible to the public, supporting the role of lawyers and other relevant stakeholders in strengthening environmental rule of law.

The need for such services is illustrated in the constantly growing number and variety of requests for data and for assistance in locating information on specific environmental law topics, which the three partners receive from governments, academia, nongovernmental organizations, companies, and members of the public. ECOLEX performs a critical function by providing ready access to environmental legal documents and informing the public of their contents.



Source: Lydia Slobodian, International Union for Conservation of Nature, e-mail to Environmental Law Institute, 22 November 2016.



and cross-pollutant comparisons. Having a unified platform also reduces the chance that one ministry will grant a concession that overlaps with a concession granted by another ministry. As illustrated in Figure 2.9, this project is being piloted in the Democratic Republic of the Congo and requires significant standardization to ensure the accuracy, verification, and interoperability of data.

2.5.3 Information Use

Information is used to support environmental rule of law in numerous ways: to determine what risks to regulate and where to focus enforcement resources; to verify compliance status; and to prove noncompliance or harm in court. Increasingly, agencies rely upon the availability of large amounts of data to search for violations and evidence of environmental harm that was not possible before, such as by analyzing data from many different public sources to identify noncompliance. In addition, new sources of data are available, such as satellite data and data submitted by citizens using their mobile phone cameras and sensing devices. Increasingly, data analytics are used to prioritize environmental compliance and enforcement efforts, informing agency decisions regarding which facilities to inspect.⁸⁸

⁸⁸ Paddock and Wentz 2014.

2. Institutions

It is essential to transparently document the information relied upon and how it was relied upon. This facilitates public review and comment upon the information use and bolsters confidence in institutional decisions. If an institution deems information not reliable or not suitable for use, it is also important to document these decisions so that they can be understood by stakeholders and defended if challenged.

Perhaps equally as important as using information is identifying the existence of information gaps. One of the main distinctions of environmental rule of law from other areas of law is the need to make decisions to protect human health and the environment in the face of significant uncertainty and data gaps. Instead of being paralyzed into inaction, careful documentation of the state of knowledge and uncertainties allows the regulated community, stakeholders, and other institutions to more fully understand why certain decisions were made. Identifying these gaps can also spur data generation. Thus, identifying information gaps and requesting additional information can be important tools to help manage uncertainty.

2.6 Investigation and Enforcement

Fair and consistent enforcement of law acts as a deterrent, builds confidence in institutions, and provides a level playing field for all. **By** creating a clear expectation of compliance as well as swift and just consequences for noncompliance, environmental rule of law can take root and protect people from the adverse impacts of violations of environmental law. Creating these expectations and consequences also has an important leveling effect within sectors by ensuring that noncomplying regulated entities do not gain a competitive advantage over those entities that do comply.

Despite the proliferation of environmental laws worldwide, many countries struggle to effectively monitor, investigate, and enforce them. Sometimes the laws themselves do not provide sufficient direction, authority, or mechanisms for implementation. There is often a lack of resources, political will, or capacity to investigate and enforce.⁸⁹ There are three key approaches that countries can take to cope with these challenges and improve environmental investigation and



Young diamond miners in Sierra Leone

89 INECE 2009, 8.

enforcement: (1) embedding investigative and enforcement programs within an overall culture of compliance; (2) tailoring investigation and enforcement programs to optimize use of the available resources and institutions; and (3) using enforcement and inspection policies.

2.6.1 A Culture of Compliance

Creating a culture of compliance with environmental regulations is a significant step toward creating effective environmental rule of law. Compliance becomes part of the culture when social values and business practices incorporate environmental standards as part of the everyday way of doing business. As discussed below, creating such a culture starts with a robust enforcement and compliance program that deters and punishes noncompliance and then becomes a system of practices by government and the regulated community that help to ensure environmental standards will be met, or exceeded, in the ordinary course of business. Practices that spur the formation of such a culture include broad understanding of the applicable environmental requirements, clear policies relating to enforcement, incorporation by the regulated community of environmental requirements into planning and operations, and common expectations across government, business, and the public that laws and regulations will be respected by all.

Data from researchers and experience around the world with enforcing laws both suggest that compliance is often contingent on a belief that the regulator will detect and punish violations using penalties that outweigh any benefits gained from noncompliance. Compliance is also contingent on a belief that peers will comply or else be similarly punished. For example, a survey of environmental compliance officials at 233 firms in the United States found that 89 percent could identify some enforcement actions against other firms, and 63 percent reported having taken some compliancerelated actions in response to learning about such cases.⁹⁰

The researchers concluded that "[d]eterrence signals both reassure 'good apples' that freeriders will be punished and reminds them to make sure that they are responsible corporate citizens with no need to fear the social and economic costs that can be triggered by serious violations."⁹¹

Inspection and enforcement actions consistently produce improved environmental performance at not just the targeted facility (specific deterrence), but can also produce significant spillover effects on other firms (general deterrence).⁹²

For example, a study of air emissions from 521 U.S. manufacturing plants showed that compliance increased in surrounding facilities after a single plant inspection.⁹³ Case Study 2.8 shows how undertaking high-profile inspection and enforcement activities can greatly increase their impact.

If achievement of environmental standards depends solely upon enforcement programs that catch and punish noncompliance, then it might be said that a culture of **non**compliance exists: the norm for stakeholders is to not comply in the hope that they will not be caught. This norm may exist because the ramifications of being caught are insignificant or because stakeholders do not know what is required of them. By contrast, a culture of compliance takes root once stakeholders have incorporated environmental standards and goals into their ways of operating and of doing

93 Gray and Shimshack 2011.

⁹⁰ Thornton, Gunningham, and Kagan 2005.

⁹¹ Ibid., 283.

⁹² Silberman 2000; Gray and Shimshack 2011; Shimshack 2007.

Case Study 2.8: High-Profile Inspection Efforts in Viet Nam

Viet Nam, facing challenges in compliance with its Law on Environmental Protection, took a different approach to dramatically raise the profile of its environmental enforcement program. In 1997, Viet Nam's Ministry of Science, Technology, and Environment undertook a large-scale inspection of over 9,000 facilities across 61 provinces and cities and ultimately found that about half of them were out of compliance. The Government of Viet Nam reports that the massive ramp-up of inspections raised awareness, resulting in increased reporting on environmental impacts, installation and construction of treatment facilities, and requests for regulatory guidance.

Thus, undertaking efforts that increase awareness of inspections and enforcement can result in greater compliance efforts by the regulated community.

business. When compliance is a routine matter, companies will consider what environmental impacts may occur and what regulations might apply when designing any new process or considering changes to existing operations that might affect the environment instead of waiting for an environmental inspector to arrive or a citizen to complain.

Governments can help foster a culture of compliance to take root within a sector or country by making clear what is expected of the regulated community, swiftly and publicly responding to noncompliance, and modeling responsible behavior itself. In particular, the following steps can help build such a culture:

- publicizing rules and regulations that apply to sectors and to the regulated community;
- setting clear policies that explain the penalties that will apply to any violations and how they will be calculated;
- applying a strategic focus on certain sectors using compliance assistance and detailed inspections and enforcement to help compliance take root uniformly across the sector;

- engaging in clear communications with stakeholders and the regulated community about the risks of noncompliance and publicizing any enforcement actions taken;
- using metrics to demonstrate progress toward a culture of compliance; and
- fighting corruption wherever it appears.



As Viet Nam's iconic Halong Bay has witnessed increased tourist traffic, authorities have pursued an array of efforts to minimize environmental impact Although traditional enforcement methods are a necessary baseline for building such a culture, many additional techniques have arisen that help businesses incorporate environmental standards into their operations. These techniques help ensure that rules and regulations are regularly complied with and even exceeded. They include:

- *Pollution inventories*, by which businesses identify and tally the pollutants they are emitting and then report this information publicly;
- Publishing information on companies' environmental performance, including innovative approaches like AKOBEN discussed in Case Study 2.9;
- Cleaner and more modern production techniques that meet or exceed environmental standards and that may require fewer resources, such as water and energy;
- Environmental management systems, such as the International Organization for Standardization 14000 standard to systematize and improve companies' environmental performance;
- Supply chain management to ensure that environmental standards are being met both for materials being procured and materials being produced; and
- Negotiated agreements and governmentindustry partnerships that allow business and government to agree to specific environmental goals and that may provide flexibility to businesses on how to meet regulatory requirements.⁹⁴

The techniques outlined above all have in common an attempt to mainstream environmental standards and management techniques into business processes. While building a culture of compliance takes time and effort, it can greatly improve environmental performance and reduce the amount of continuing government effort expended in enforcement.

2.6.2 Tailored Enforcement Solutions

Enforcement solutions tailored to the sector and country context are more likely to succeed in establishing environmental rule of law. Although much experience has been gained by agencies worldwide as they implement environmental law, there is no single solution for creating inspection and enforcement systems. A wide variety of factors affect what will work in the myriad circumstances around the world, such as climate, culture, economics, geography, legal systems, and legal traditions. As noted by experienced environmental enforcement officials, "[i]t is crucial ... to consider the institutional settings within any particular country studied, and good practices suggested for improving enforcement should be adapted to the particular circumstances of individual countries."95

Countries use a wide variety of enforcement systems, with some centralized, others decentralized, and yet others sharing responsibilities between national and subnational authorities. Some countries such as Sweden and Switzerland—have a decentralized system of environmental enforcement that relies on local and provincial institutions to take the lead in enforcement, with general coordination and priority setting coming from the national

⁹⁵ UNEP 2014, 7.

⁹⁴ Keene 1999.

2. Institutions

environmental ministries.⁹⁶ Others—such as Singapore and France—put central control of environmental enforcement at the national level. And still others have a system that provides for concurrent authority to enforce environmental laws at both the national and subnational levels; this is particularly common in federal countries such as Mexico, Brazil, and India.

Enforcement systems are also differentiated by whether enforcement is conducted from a stand-alone office or is combined with programmatic actions of the same agency. Some agencies combine enforcement and regulatory development activities in the same office, while others separate regulatory development and enforcement into separate offices. While it can be instructive to learn from the practices and experiences of other nations, each country's solution ultimately depends on its own institutions, capacity, culture, and objectives.

Innovative methods of compliance and enforcement can be used to create tailored enforcement systems, often at a relatively low cost. Next generation compliance systems using new technological toolssuch as satellite data and remote sensing, electronic reporting, and data analyticsallow regulators to detect potential violations more readily.97 Innovative reporting and ranking systems require companies to selfreport monitoring and compliance data and then give companies ratings in terms of their environmental performance, as illustrated in Case Study 2.9. These practices and others are detailed in helpful case studies and facilitated peer-to-peer discussions of best practices at international organizations such as the International Network for **Environmental Compliance and Enforcement** and UN Environment.

2.6.3 Inspection and Enforcement Policies

Adopting and publicizing clear and focused inspection and enforcement policies help direct scarce enforcement resources. They also help educate the regulated community and public about enforcement priorities, thereby encouraging compliance and building legitimacy. Inspection policies that clearly identify how inspections are to be conducted, including specification of available methods of investigation and how inspection results are to be documented, are particularly helpful. Enforcement policies may outline how authorities are focusing their resources, such as using risk-based enforcement to target those facilities that pose the highest risk to public health and the environment and choosing to focus resources on a few high-priority sectors each year. **Policies that** spell out the objectives and methods of an enforcement strategy help focus staff and the regulated community on the most important issues.

Inspection and enforcement policies provide standard protocols for inspectors and investigators to follow nationally and across sectors. They are particularly useful when inspections and enforcement are decentralized as they help to ensure consistent priorities and approaches across a country or sector. They also help to instruct the regulated community on how to demonstrate compliance. The World Bank has reported that many national regulatory bodies fail to publish inspection criteria and enforcement guidance, meaning businesses lack clarity on what rules they should be following.⁹⁸

For example, Malaysia adopted standard operating procedures applicable to all enforcement officers. These procedures are comprehensive and cover: development of

⁹⁶ OECD 2018.

⁹⁷ Paddock and Wentz 2014; Hindin et al. 2016; Baptista 2016.

⁹⁸ World Bank 2011.

annual inspection programs; prioritization of sectors to be the focus of enforcement efforts based on previous compliance and noncompliance; procedures to be followed during inspection and investigation; methods for sampling and collecting evidence; guidance on recording statements; procedures for issuing detention orders and prohibition orders to stop specific pollution; and preparation of documents for referring matters to the Attorney General for prosecution.⁹⁹

As the Malaysia experience illustrates, focusing enforcement efforts on particular sectors is a common strategy. Using this approach, enforcement agencies announce that two or three sectors will receive heightened enforcement scrutiny in the coming year. This allows inspectors to focus their resources instead of trying to cover all sectors. In addition, the added attention to a sector can cause companies to refocus attention on compliance. For example, every three years the U.S. Environmental Protection Agency announces its National Enforcement Initiatives to focus resources and attention on several areas of significant noncompliance where federal efforts may help to change behavior.¹⁰⁰

2.7 Environmental Auditing and Institutional Review Mechanisms

Environmental auditing provides an independent third-party review of the environmental performance of an industrial facility, an agency, and even an entire government program. Auditing of companies and facilities can identify noncompliance and motivate efforts to return to compliance. Auditing of agencies and programs can deter corruption and misconduct, identify institutional shortcomings, critically analyze government operations and programs, and evaluate the effectiveness of regulatory approaches to environmental problems.

Many countries seek to improve compliance by **encouraging environmental management or compliance audits by the regulated community**. These audits are usually conducted by an independent third-party auditor hired by a company to review a company's or a facility's environmental management systems and compliance with laws and regulations. This can help the company to proactively identify and correct shortcomings in its environmental compliance program.

Some countries have policies that encourage companies to self-report the environmental audit findings; in return, companies receive reduced or deferred penalties provided they come into compliance. Under Mexico's voluntary Environmental Auditing Program, for example, organizations are voluntarily evaluated by independent auditors for compliance with environmental laws and regulations.¹⁰¹

Organizations agree to correct any violations by a certain date in exchange for a commitment by the Mexican Attorney General for Environmental Protection not to take enforcement action until after that date. If the organization meets the compliance requirements, it receives certification as a Clean Industry; if it goes beyond the requirements to achieve certain pollution prevention and eco-efficiency guidelines, then it receives a certification of Environmental Excellence.

Government agencies and programs themselves also strongly benefit from audits. There are over 193 national auditing

⁹⁹ UNEP 2014, 7.

¹⁰⁰ USEPA 2018.

¹⁰¹ Blackman et al. 2009; INECE 2015.

Case Study 2.9: The Power of Information in Ghana

The AKOBEN program is an environmental performance rating and disclosure initiative of the Ghana Environmental Protection Agency. Under the AKOBEN initiative, the environmental performance of the 16 largest mining and 100 largest manufacturing operations is assessed using a five-color rating scheme that indicates environmental performance ranging from excellent to poor. These ratings are performed by the government and annually disclosed to the public and the general media, and they aim to strengthen public awareness and participation.

AKOBEN ratings are derived by analyzing more than one hundred performance indicators that include quantitative data as well as qualitative and visual information. These ratings measure the environmental performance of companies based on how well their day-to-day operations match their compliance requirements.

The Ghana Environmental Protection Agency and companies also assess community complaints. Companies can address community complaints and are required to preserve a comprehensive record of the complaints and responses. The Agency can verify these complaints by conducting field visits, holding discussions with companies and communities, and collecting samples for technical review and analysis. The Agency also collects data for the social responsibility evaluation by reviewing a company's social responsibility policy, reviewing it for creating a checklist of commitments and recommended activities to compare against what the company has actually done.

Company executives observe that the ratings system has improved company performance, while some nongovernmental organizations complain that few companies are ranked highly and that the results are not publicized adequately.

Limited evidence suggests some improvement in environmental performance by participating companies.

agencies—often called Auditors General or Courts of Accounts and generally referred to as supreme audit institutions—that perform financial and other audits to help governments and stakeholders gauge both financial and substantive performance of institutions and programs. These organizations, sometimes referred to as institutional review mechanisms, usually take one of three forms:

AKOBEN RATING SYSTEM				
Rating Level	Performance	Implications		
RED	POOR	Serious Risks		
ORANGE	UNSATISFACTORY	Not in compliance		
BLUE	GOOD	In Compliance		
GREEN	VERY GOOD	Applies Best Practices		
GOLD	EXCELLENT	Committed to Social Performance		

KODENI DATINIC CVCTEM

 Napoleonic, used in many Latin American countries as well as France, Italy, Portugal, and Spain, in which the court of accounts sits in the judicial branch and reviews government compliance with laws and regulations as well as ensuring that public funds are spent appropriately;

- Westminster, predominant in Commonwealth countries, in which the office of auditor general is an independent agency that reports to the legislature and issues periodic reports on government performance; and
- *Board system*, widely used in Asia, which is also independent and analyzes government spending and reports to the legislature.

Auditing is often thought of as an examination of the financial aspects of government programs and institutions. This is a critical function of auditing institutions, particularly as financial audits help identify corruption and waste of government resources. With respect to environmental rule of law, performance auditing is also critically important. Performance auditing is a specific form of auditing that reviews the economy, efficiency, and effectiveness of the implementation of laws and regulatory programs and seeks to determine whether that implementation is meeting the ultimate statutory goals. Environmental performance audits usually examine one or more of the following aspects of governmental environmental performance:

- performance of environmental programs;
- impacts of other government programs on the environment;
- effectiveness of environmental management systems and environmental reporting;
- merit of proposed environmental policies and programs; and
- performance of government laws and regulations in addressing cross-cutting environmental issues.¹⁰²



Performance audits can be targeted (such as examining the effectiveness of a single regulatory program) or broad (such as examining how to integrate climate resilience measures across the government). For example, Colombia's audit agency found that the government's system of charging companies for discharging effluent to waterways was ineffective.¹⁰³ It found that discharge data often did not match the amount charged for the discharge and did not discourage water pollution. The agency recommended better data collection and more water quality sampling to improve the program. Similarly, the Lesotho supreme auditing agency examined the Department of Soil and Water Conservation's soil erosion efforts and found, in part, that public information campaigns were airing at times most citizens were not watching or listening to TV or radio and that more outreach needed to be done for communities without electricity, and therefore without access to TV and radio.¹⁰⁴ Case Study 2.10 shows how performance auditing, while difficult, can yield important insights across institutions.

Performance audits can examine domestic implementation of international agreements

¹⁰³ INTOSAI 2016. 104 Ibid.

¹⁰² INTOSAI 2016, 10.

as well. UN Environment and the International Organization of Supreme Audit Institutions have prepared extensive guidance on auditing government adherence to and implementation of multilateral environmental agreements.¹⁰⁵ In addition to examining whether a government has adopted implementing legislation and regulations and the effectiveness of such efforts, the guidance notes that multilateral environmental agreements are an important source of criteria to use in environmental auditing as they provide agreed-upon benchmarks and good practices for environmental governance.

It is critical that audits be done by independent authorities, either within or external to institutions that implement government programs. *Independence of the auditor and auditing institution help to assure reliability and confidence in the audit results.* In addition, auditing institutions need adequate capacity, resources, and political support to achieve their missions, similar to the needs for environmental institutions discussed in Section 2.4 above.

2.8 Leadership

Good leaders create better environmental institutions by directing and inspiring action, building morale, and modeling compliance with law, transparency, and accountability so that these values flow through an organization. *Leaders take the intent and directives of environmental law and translate them into action* by envisioning and setting a direction to be followed, giving guidance and support to staff, coordinating among staff to increase productivity, and building team spirit within an organization.

Leaders exist throughout agencies, across sectors, and throughout society. Leaders can

be managers within companies who nurture a culture of compliance by establishing policies and holding staff accountable for results. Leaders can be agency staff who identify regulatory overlap or underlap to supervisors and help guide regulatory programs to better results. And leaders can be community members who speak up when seeing environmental harm and who seek justice.

Leadership means acting directly to implement environmental rule of law or creating the conditions under which environmental rule of law can be implemented in a meaningful and efficient manner. Leaders enunciate a vision that inspires others toward a common goal and then reinforce that vision by acting with integrity toward achieving that goal—as former UN Secretary-General U Thant did with his vision of "One World".¹⁰⁶ Leaders like Goldman Prize winner Zuzana Čaputová see an ongoing threat and use environmental law to bring justice to their community: Ms. Čaputová saw a landfill affecting local public health in Slovakia and mobilized local institutions to close down the landfill.¹⁰⁷

Institutions lead other institutions, just as people lead other people. The way an environmental agency conducts its business sends clear messages to the regulated community and other constituencies about the agency's expectations for their behavior. Thus, while independent auditing and review bodies are essential, the strongest force for institutional integrity comes when institutional leaders comply with the law and adhere to the highest ethical standards.¹⁰⁸

This section examines three aspects of leadership critical to achieving environmental rule of law: (1) political will to ensure that environmental laws apply to all, (2) leadership

¹⁰⁶ Thant 1994.

¹⁰⁷ Goldman Environmental Foundation 2017.

¹⁰⁸ Langseth et al. 1997.

¹⁰⁵ UNEP 2010.

Case Study 2.10: Performance Auditing Suggests Key Reforms in Indonesia

The Audit Board of the Republic of Indonesia was charged with assessing the effectiveness of water resources management activities for the Citarum River. From 2009 to 2012, the Audit Board met with a variety of agencies, experts, and stakeholders to assess the river basin's water management. The Audit Board used advanced technologies, including geographic information systems and water sampling, to assess land use and land cover and to identify likely sources of water pollution.

In completing the performance audit, the Audit Board encountered several difficulties, notably grappling with the diversity of institutions involved in the river's management, the complex roles these institutions played in water management, and the difficulty of synchronizing the wide variety of regulations that applied to river management.^a After many consultations and convening meetings with the diverse set of authorities and stakeholders, the agency recommended that the national government implement new regulations already authorized under existing legislation to better address water quality and undertake planning to address domestic sewage treatment and disposal, particularly in urban areas. The auditing agency's independence from existing institutions and its ability to undertake a broad review of the river's management allowed it to make comprehensive recommendations, free from existing institutional politics or priorities.

a. ASOSAI Working Group on Environmental Auditing n.d.

in fighting corruption, and (3) management techniques to inspire good performance.

2.8.1 Political Will

Environmental rule of law takes root when leaders demonstrate clear and firm political will to implement environmental laws, even in the face of opposition and disagreement. Political will means the firm commitment to implement a policy, especially one that is not immediately popular. Enacting environmental legislation can be difficult and can require many compromises to agree to a final law in the legislature. But the real challenge arises when these laws are implemented through regulations, policies, and actions that directly affect stakeholders' livelihoods, lands, properties, and profits. *Often environmental rule of law falters at this critical juncture because of a lack of political will to stand behind implementation of the law through clear regulations and policies that are enforced equitably and consistently.*

A growing body of case studies and quantitative analyses highlights the importance of leadership in environmental policy and governance. The importance of leadership is supported by many large-N studies which find that the presence of a leader has a high to moderate or mixed positive influence on environmental governance outcomes.¹⁰⁹ Correspondingly, absence of leadership has been connected to ineffective management outcomes,¹¹⁰ as well as inertia in addressing new problems.¹¹¹ Political will is closely related to leadership, although many factors can influence the political will of a particular leader, just as political will is but one of many factors influencing governance outcomes.¹¹² Fundamentally, though, it must be recognized that laws do not enforce themselves; people enforce laws. As noted in Chapter 1, there are many reasons that people may not comply with a law, and reasons that governments may not enforce a law. Environmental rule of law thus depends on leadership and political will.

Political will requires vision as well as courage. In the early 1970s, political leaders in the U.S. Senate recognized that industrial and motor vehicle pollution were unsustainable and were causing increasing levels of public discontent. They worked across political parties and with the executive branch to create a system of environmental laws that became a model for modern environmental law.¹¹³ Their vision of a cleaner environment coupled with a commitment to finding a system that would work despite opposition and several missteps along the way led to dramatic improvement in environmental conditions in the United States and widespread public support for environmental regulation.

More recently, then-President Ellen Johnson Sirleaf of Liberia repeatedly showed her political will in reforming forestry governance. Under Charles Taylor, timber had helped finance civil war in Liberia; the UN Security Council imposed a ban on Liberian timber in an effort to end the conflict, and sustained the ban until the country had reformed the laws and institutions governing forestry.¹¹⁴ Following her election, President Johnson Sirleaf instituted a code of conduct for public servants, declared a no-tolerance policy towards graft, and vowed to be transparent about her own finances. She cancelled all of the existing timber concessions (a review had shown that not a single concession was legal) and pushed through the National Forestry Reform Law and implementing regulations. The Security Council lifted the ban in 2006.

President Johnson Sirleaf continued to exert her political will to fight corruption in the forestry sector in subsequent years by concluding a Voluntary Partnership Agreement with the European Union to ensure that all logs, timber, and timber products exported were legal; adopting a regulatory and institutional infrastructure to ensure timber legality; and cancelling private use permits that had been illegally granted.¹¹⁵ Notwithstanding the vested interests (domestic and international), the limited institutional resources, and the many competing priorities facing her as she led the rebuilding of her country after a brutal civil war, President Johnson Sirleaf showed great resolve to ensure that Liberia's forestry sector was governed and administered according to the rule of law.

The international community also plays a critical role in fostering and building political will across nations. When political pressure builds domestically that may undermine environmental initiatives, peer pressure from other countries, regional bodies, and international organizations can help reinforce the need for responsible environmental action.

¹⁰⁹ *See, e.g.*, Pagdee, Kim, and Daugherty 2006; Evans et al. 2015.

¹¹⁰ Fabricius et al. 2007.

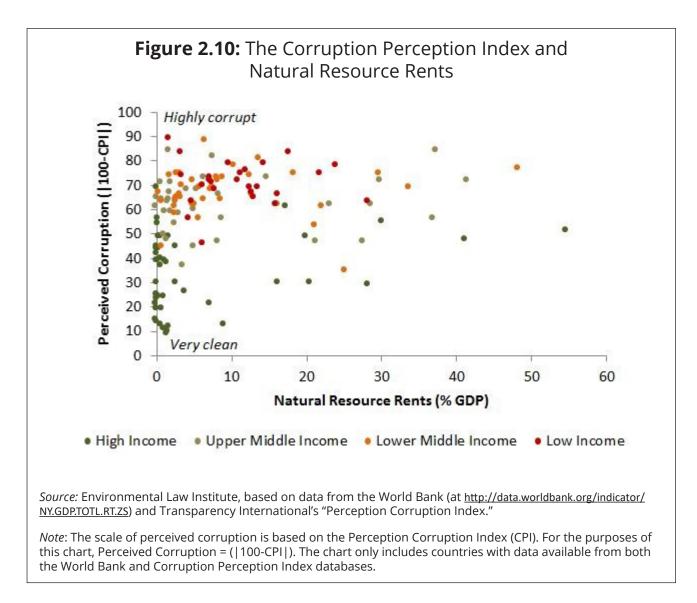
¹¹¹ Scheffer, Westley, and Brock 2003

¹¹² DFID 2004.

¹¹³ Lazarus 2008; Billings 2015.

¹¹⁴ Altman, Nichols, and Woods 2012.

¹¹⁵ Ibid.; Beevers 2015.



2.8.2 Anti-Corruption Measures

Corruption is an issue in all countries, regardless of how developed their institutions are. Countries that are heavily reliant upon natural resources as a source of gross domestic product are particularly at risk from corruption because the government usually controls access to many of the resources.¹¹⁶ Studies that have compared countries with similar social and economic conditions find

that natural resource wealth greatly increases the likelihood that corruption will be rife.¹¹⁷ Figures 2.10 and 2.11 illustrate this correlation. Having government officials responsible for great wealth, particularly when government pay may be meager, creates conditions that are conducive to graft and corruption. In fact, some scholars believe that the connection between natural resource wealth, rent seeking, and corruption is the root cause of

¹¹⁷ These same findings have been made when comparing resource-rich and resource-poor regions within the same country. *See* Paltseva 2013.

¹¹⁶ For a review of the literature, see Paltseva 2013.



the resource curse discussed in Section 2.1.2.1 above.¹¹⁸ In addition, several scholars point to the fact that corruption directly impacts the environmental health of the public.¹¹⁹ Rather than imposing its costs equally across society, corruption can act as a regressive tax and discourages the poor from seeking access to basic public services, such as water.¹²⁰

Countries that are industrialized are also vulnerable to corruption, as the cost of compliance with environmental regulation can be significant and the pay and resources available to environmental regulators can be minimal. Accordingly, measures to fight corruption, which are discussed below, can reduce the potential for graft and bribery of officials such as inspectors, enforcers, and permitting officers.

Transparency and accountability are the primary tools for preventing and punishing corruption.¹²¹

As corruption thrives when there is no oversight, transparency regarding contracting, inspections, and enforcement fosters a culture of compliance within an institution and the regulated public.¹²² Transparency increases the chance for detecting illegal behavior. Ensuring that instances of good ethical conduct are rewarded, and instances of poor ethical conduct are publicized, can also help to end corruption. A number of studies show the impact of institutional transparency on lowering corruption, empowering local voices, increasing citizen engagement, and improving budget utilization.¹²³ Studies have even found "a clear correlation" between increased transparency and human development indicators.124

Many countries publish standards for ethical conduct that staff pledge to uphold upon taking office. For example New Zealand's Standards of Integrity & Conduct—issued by the State Services Commissioner under the State Sector Act 1988, section 57—declares that government employees must be fair, impartial, responsible, and trustworthy. The code of conduct's implementation guidelines suggest policies and procedures to ensure that government organizations meet expectations in each of these four areas.¹²⁵ Ensuring that such standards are publicized, adhered to, and enforced can build a culture resistant to corruption.¹²⁶

- 123 Gaventa and McGee 2013.
- 124 de Renzio et al. 2009.
- 125 New Zealand State Services Commission 2009.
- 126 Whitton 2001.

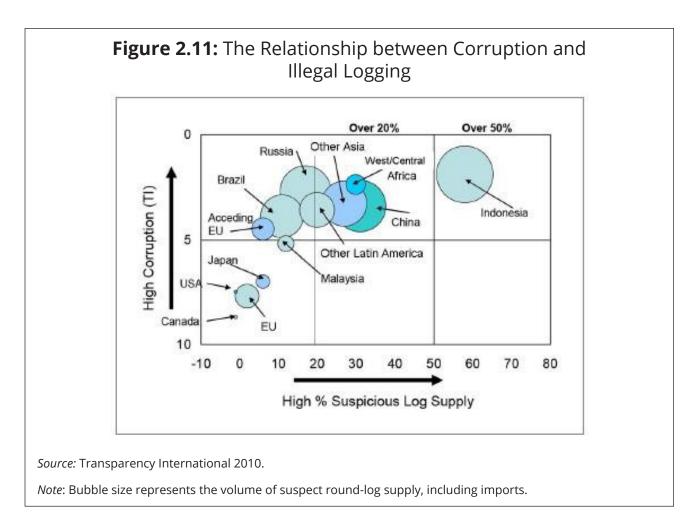
¹¹⁸ Pendergast et al. 2011.

¹¹⁹ Welsch 2003; Damania 2002.

¹²⁰ Kaufmann, Montoriol-Garriga, and Recanatini 2008.

¹²¹ For a review of the theory and emerging evidence on transparency in the management of extractive resources and their revenues, see Epremian et al. 2016.

¹²² Fasterling 2012.



Independent auditing and institutional review mechanisms, like those described above, also play important roles in detecting, investigating, and deterring malfeasance. The International Network of Supreme Auditing Institutions has published extensive guidance on undertaking comprehensive auditing to detect and deter corruption in the environmental context.¹²⁷ Whistleblower protections are also effective. Such protections ensure that those who report instances of corruption are protected from reprisals and often provide rewards to those who identify illegal behavior that is substantiated, as discussed in Chapter 4.

2.8.3 Pay and Personnel Management

Sound personnel management practices ranging from timely and fair performance reviews to adequate pay—build dedicated work forces that implement environmental rule of law. **Pay is widely recognized as a determinative factor in public-sector performance and as a key component of institutional capacity-building**.¹²⁸

Pay impacts motivation, work effort, recruiting, and retention rates. Although pay is not a primary determinant of corruption, evidence indicates it plays a role, particularly

¹²⁷ INTOSAI 2013.

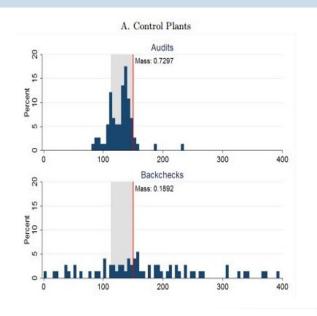
¹²⁸ Stajkovic and Luthans 2003.

Case Study 2.11: Structuring Pay Incentives to Reduce Misreporting of Pollution in Gujarat

In 2009 and 2010, the Gujarat Pollution Control Board in India used a third-party audit system for plants with high potential to pollute as part of its regulatory program. Under this system, auditors visited the plant and took samples three times over the course of a year, then submitted an audit report to the Pollution Control Board that could serve as the basis for regulatory action. The audit system incorporated several safeguards by requiring auditor accreditation, limiting an auditor from accepting consultancy work from the plants they audited, limiting the number of audits undertaken in the year, and granting authority to decertify auditors found to be inaccurate.

Despite these safeguards, an experiment designed to measure the effects of the auditors' pay incentives revealed striking results. In the first year of the experiment, auditors were randomly assigned to a group of plants (the "treatment group"), paid through a central account, and informed that their audits could be subject to verification. In the second year, auditors assigned to the treatment group were informed their pay for an audit would be scaled based on its accuracy. The "control group" of auditors continued to be paid by plants directly and was not told that their audit could be subject to backchecks.

The control group systematically underreported pollution readings, compared to the results as measured by backchecks. Notably, auditors in the control group systematically and incorrectly reported many pollution readings to be just below the regulatory standard (i.e., in compliance). In the treatment group, on the other hand, the changes in pay incentive structure resulted in the audits reporting results consistent with backchecks by the end of the experiment. More remarkably, the plants that were subject to increasingly accurate audit reports responded by significantly reducing their pollution emissions.^a Thus, performance-based pay incentives not only improved employee performance, they improved environmental outcomes.



Readings for Suspended Particulate Matter SPM, mg/Nm3), Midline

Source: Duflo et al. 2013.

a. Duflo et al. 2013.

in petty corruption.¹²⁹ Evidence suggests that bribery can become endemic in countries that have undercompensated public servants.¹³⁰

Performance-based pay means that compensation is tied to certain performance measures, such as the number of inspections conducted. This compensation method can provide a strong incentive to align employee motivation to performance outputs. To work successfully, the metrics used must be clear, measurable, and attributable to the employee being reviewed.

Performance-based pay has to be used with care in the context of environmental regulatory and enforcement institutions where environmental outcomes, such as reduced pollution, can be difficult to tie to the performance of a particular employee. Metrics such as number of permits issued, inspections conducted, and enforcement actions taken are often used. It is important to note, however, that these are not direct proxies for environmental outcome. As noted in Case Study 2.11, performance-based pay can create important incentives and disincentives alike. As a result, it is important to consider both quantitative metrics (such as those above) along with more qualitative considerations (such as citizen satisfaction surveys) to more completely understand performance.

Another effective management tool is the use of competitive, transparent processes for filling positions. These processes increase the likelihood that the best staff have been hired, free from favoritism and undue influences. This builds public confidence in the institution and attracts qualified staff.

Conducting performance reviews at least annually and providing periodic constructive feedback to staff can also be effective management tools. Staff who are underperforming can be given clear, concrete examples of ways they can improve, while staff who are performing well can be praised and told how they are excelling. This helps ensure staff accountability and builds morale.

2.9 Opportunities and Recommendations

Effective institutions are essential in overcoming the implementation gap in environmental rule of law. To be effective, institutions need adequate resources, clear mandates, effective coordination, reliable data, and sound leadership.

Many countries have environmental laws and institutions in place but have yet to realize their full potential. Often, these laws and institutions were modeled on those in other countries, and they have not been adapted to reflect local culture, practices, and resources, or fully fleshed out to provide sufficient direction, authority, and mechanisms for implementation. Many opportunities exist to strengthen institutions to make them more effective and legitimate, thereby strengthening not only environmental rule of law, but social inclusivity, cohesion, and stability.

As an initial step, *policymakers can evaluate the current mandates and administrative structure of environmental institutions to identify regulatory overlap or underlap*. Supreme audit institutions or other independent oversight bodies can be tasked with examining the overall effectiveness of existing efforts and with recommending ways to better tailor the country's environmental institutions to existing environmental, economic, and social priorities. Convening stakeholders from government, communities, regulated parties, and academia can yield further insights into whether the risks are being identified and prioritized appropriately

¹²⁹ Mookherjee et al. 1995; Rijckeghem et al. 2001. 130 Gorodnichenko and Peter 2007.

and whether effective means are being used. This can help policymakers better target scarce resources and engender confidence and trust from the public.

Because there is significant competition for scarce government resources, innovative policies can increase environmental impact without increasing spending. For example, many countries have required the regulated community to publicly disclose emissions and waste disposal data, which motivates companies to reduce environmental impacts. Other nations rank polluters based on performance criteria to spur the private sector to comply with or even exceed compliance requirements. Announcing enforcement priorities can bring public attention to areas of potential noncompliance and encourage the regulated community to take corrective action before inspectors arrive.

Leaders and staff who demonstrate integrity in managing environmental institutions **engender a culture of compliance** that can spread beyond the institution. Corruption within an institution undermines goodwill and compliance efforts. Common sense management techniques, such as adequate pay, performance reviews, and meaningful performance measures, can boost staff morale and deter corruption, which in turn can result in better environmental outcomes.

International institutions, nongovernmental organizations, and bilateral agencies build capacity, share information, and finance many domestic efforts to implement and enforce domestic environmental laws. They are often crucial partners in investigating transnational environmental crime. *The international community's efforts to coordinate, train, and provide resources are essential to fostering improved implementation of environmental rule of law.*

Although they are often viewed as mundane tasks, *investing in information collection*

and management systems is vital to building strong institutions. Putting in place data quality guidelines and standardized data collection systems can help streamline information collection and management, reduce burden on both the regulatory and regulated communities, and increase data reliability and accessibility.

The form of a country's environmental institutions should, over time, come to match the contours of the country's local institutions. Often this can mean looking for opportunities to **engage with customary institutions to strengthen environmental rule of law**, particularly in rural areas. Communities possess vast amounts of knowledge and have developed customs over centuries to manage natural resources. Opportunities to rely on these practices and customs can be explored to strengthen environmental outcomes and public engagement.

Effective institutions are the engines that drive environmental rule of law around the globe. This chapter has outlined principles for sound design and maintenance of institutions to help achieve optimum performance. Because each country context is unique, and because circumstances and best practices are continuously evolving, the best institutions embark on a process of constant learning and reexamination of their goals and methods to ensure they are delivering sound environmental rule of law.



3. Civic Engagement

3.1 Introduction

Environmental rule of law requires a wholeof-society approach. While substantial emphasis is naturally placed on strengthening governmental institutions at the national, regional, and local levels, civil society¹ also plays an essential role.

The effective engagement of civil society results in more informed decision making by government, more responsible environmental actions by companies, more assistance in environmental management by the public, and more effective environmental law. When civil society has effective access to environmental information and meaningful opportunities to participate, it is better equipped to hold violators to account and ensure compliance with environmental protections and thus to support development of environmental rule of law. It can also help to monitor environmental management and ensure that ministries and other governmental authorities undertake actions required by law and that are in the public interest. Involving vulnerable and marginalized populations that are often excluded from decision making and yet are most affected by environmental and natural resource decisions is a challenging but integral aspect of civic engagement. Including the public in decisions about the environment and natural resources is a cornerstone of good governance that has the benefit of building trust of local communities in government, which increases both social cohesion and environmental rule of law.

Civic engagement is a dynamic process in which information is shared between government and the public as part of inclusive, consultative, and accountable decision making. Meaningful participation of civil society in environmental decision making provides a

¹ This Report takes a broad view of civil society that encompasses a wide range of actors and interests that are distinct from the government and private sector. In practice, civil society tends to be diverse and heterogeneous, with varying (often competing) interests, experiences, and capacities.

range of environmental, economic, and social benefits to government agencies, business, civil society, and the broader public. For example, a review of 239 cases of public participation in environmental decision making in the United States found that decisions were substantively improved in a significant majority of cases (68 percent).² Participation was found to add new information to analyses; lead to new and innovative solutions; reframe issues (and potential solutions) from a more holistic and integrated point of view; and result in more cost-effective solutions. The analysis suggested that the process of participation—rather than its context or the nature of the issues at hand—is largely responsible for success. It also found that intensive and deliberative processes are more likely to be successful.

The fundamental role of civic engagement in environmental decision making was formally recognized in Principle 10 of the 1992 Rio Declaration on Environment and Development.³ Rio Principle 10 articulated the three pillars of civic engagement in environmental decision making: (1) broad access to information concerning the environment that is held by public authorities; (2) realistic and meaningful opportunities to participate in decision-making processes related to the environment; and (3) effective access to judicial and administrative proceedings to provide redress and remedy to uphold both the access rights themselves and other environmental protections that are guaranteed under law.4

4 UNGA 1992.

These three pillars are not only practical mechanisms for implementing civic engagement, but access to these procedural guarantees has increasingly been acknowledged by the international community as the necessary basis for ensuring protection of both the emerging right to a clean and healthy environment and other substantive rights.⁵ As procedural rights, the elements of civic engagement do not guarantee a specific environmental or social outcome, but rather help to ensure that decisions and actions impacting the environment adequately and equitably represent the various interests of citizens and stakeholders. In doing so, they contribute to the recognition of environmental deprivations of existing rights, and the increased transparency and accountability in decision making, building a stronger basis for environmental rule of law to produce more effective and equitable environmental outcomes.

Over the years since the 1992 Rio Summit, these procedural obligations have been elaborated in international and regional treaties and nonbinding agreements, in



⁵ UNGA 2018.

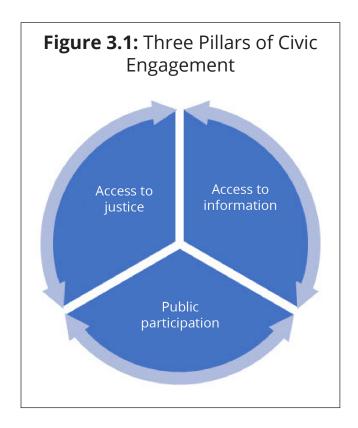
² Beierle and Cayford 2002.

³ The Rio Principle 10 pillars are commonly referred to as "access rights," "public participation," and "stakeholder participation," or as the components of "environmental democracy." In this Report, we use the term "civic engagement" to emphasize the participatory approaches to strengthen environmental rule of law.

international jurisprudence, through the development and implementation of a wealth of national legal and regulatory frameworks, and in voluntary international standards. As a result, the basic principles and key elements of these procedural rights have been elaborated, and the lessons learned in countries around the world demonstrate the fundamental role meaningful engagement of civil society plays in building environmental rule of law. Experience in implementing these various elements also provides insights into the challenges of effective civic engagement, particularly in the face of emerging threats such as climate variability and change, as well as other environmental challenges such as biodiversity loss and pollution among others. Many of these challenges are common across countries and regions, offering opportunities for sharing lessons for innovative solutions across jurisdictions, which are explored in this chapter.

This chapter focuses on the rights to information and participation in decision making. Access to justice is covered separately in the Justice Chapter, in order to fully cover all aspects of judicial remedies and enforcement as related to environmental rule of law. It is important to recognize that these three pillars of civic engagement-information, participation, and justice—act in a synergistic and mutually reinforcing manner to support increased inclusivity, transparency, and accountability in environmental rule of law, as shown in Figure 3.1. Access to information allows for more informed and effective civic engagement in the creation, implementation, and enforcement of environmental laws. Participation improves the information available to decision and law makers and among stakeholders and also provides a means for resolving disputes before they escalate. Access to justice ensures that governments and other decision-making

bodies respect the procedural rights of access to information and participation, the substantive environmental interests of the various affected parties guaranteed by law, and the public's role in ensuring robust enforcement of environmental laws. Together, the three pillars are a critical part of environmental rule of law.

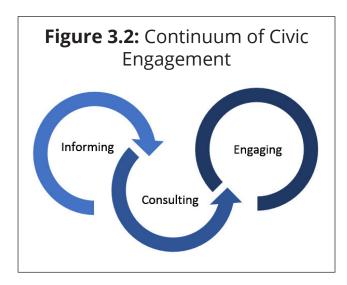


For example, if a forestry concession is to be awarded by the government, it is critical that the public be informed that a concession is being considered as soon as practicable. The government can provide information about potential concession areas and potential environmental and social impacts. With this information, the public can participate in the design and award of the concession, provide information the government and concessionaire may not have, and can monitor the concession once awarded. With access to justice, the public can ensure that its rights are respected, that the government follows the legally mandated processes in managing the concession and its revenues, and help oversee and ensure long-term enforcement of the terms of the concession.

This chapter explores the legal and practical tools for civic engagement that support environmental rule of law. After reviewing the various types of civic engagement, its benefits, and challenges to its implementation, the chapter discusses ways that States are providing access to environmental information and enhancing public participation in environmental decision making.

3.1.1 Continuum of Civic Engagement

Civic engagement exists as a continuum of practices that can be separated into three major types, as shown in Figure 3.2: informing civil society, consulting with civil society, and actively engaging civil society.



At one end of the continuum is *informing civil society*—or providing clear and unbiased information that clarifies the environmental issues at hand, how a decision-making process or proposed law or regulation might impact the environment, any alternatives to proposed decisions or actions, and potential solutions to any conflicts that might arise. This is essentially a one-way flow of information from the government, often through hired consultants, to civil society; and it is not engagement in its true sense. However, access to information is the basis for and a prerequisite to more interactive forms of stakeholder engagement. It enables civil society to understand the nature of issues and to decide whether their involvement in shaping those issues is necessary. The process of informing civil society thus improves the quality of more participatory forms of engagement by ensuring that all involved are reasonably informed. As Case Study 3.1 shows, providing information on the state of the environment helps citizens understand the quality of their environment, gauge environmental priorities, assess the performance of environmental laws and agencies, and determine how to improve environmental compliance and enforcement. There are many ways to provide the public with environmental information, including websites with up-to-date information on the state of the environment and sources of pollution; information repositories; hotlines; briefings; and use of the press and media to communicate with the public.⁶

Further along the continuum is **consulting with civil society**. Consultation not only provides civil society with information, but also seeks feedback on proposed and ongoing activities. This may include opportunities to provide written comments on proposed projects that are undertaking environmental impact assessment or to review proposed

⁶ Henninger et al. 2002, 61-64.

Case Study 3.1: New Zealand's Environmental Reporting Act

New Zealand's Environmental Reporting Act 2015 calls for the government to publish a synthesis report every three years that describes the state of New Zealand's environment, pressures that the environment faces, and impacts that the state of the environment is having on ecological, economic, social, and public health.^a The Ministry of Environment and the Statistics Office are to collaborate in producing the report. The Act also requires these offices to produce a domain report every six months that examines one of five domains (air; atmosphere and climate; fresh water; land; and marine) so that each domain is examined every three years.

The first synthesis report was released in 2015,^b and the government also maintains a website that presents indicators and trends across the five environmental domains as well as about biodiversity.^c

environmental permits for facilities. As such, consultation can help to ensure that government staff follow the required steps and standards; this is especially important when government capacity is limited or there may be concerns about agency capture.⁷ Consultation may also involve surveys or interviews to determine public views on proposed environmental laws or public hearings to gather oral comments. Surveys and hearings can be particularly useful in determining systemic performance, and in identifying areas that require reform or other measures to ensure environmental rule of law. In essence, consultation is twoway communication in which the opinions and values of interested and affected parties in particular, and civil society in general, are asked for and duly considered, even if they are not necessarily incorporated into a final decision, project design, or law. Case Study

The most substantial form of civic engagement—both in terms of impact and cost—is *active engagement*. Beyond presenting civil society with options and seeking their feedback, active engagement involves people much earlier and continues throughout the process. People may be asked to help identify environmental compliance and enforcement issues or to assist in monitoring and enforcement. This may involve formal or informal discussions with stakeholder groups. At this highest level of participation, stakeholders become active in making, implementing, monitoring, and enforcing environmental decisions. Case Study 3.3 below discusses Mongolia's use of councils to actively engage stakeholders in sustainable development.

a. Environmental Reporting Act 2015 (New Zealand), sec. 8, available at <u>http://www.legislation.govt.nz/</u> act/public/2015/0087/latest/whole.html#DLM5941112.

b. <u>http://www.mfe.govt.nz/publications/environmental-reporting/environment-aotearoa-2015</u>.

c. <u>http://www.stats.govt.nz/browse_for_stats/environment/environmental-reporting-series/</u><u>environmental-indicators/home.aspx</u>.

^{3.2} gives an example of Quebec's consultation process.

⁷ Bruch 2002.

Case Study 3.2: Consulting the Public on Hydraulic Fracturing

In 1978, the Canadian province of Quebec passed the Environmental Quality Act, establishing the Bureau d'audiences publiques sur l'environnement (Bureau of Public Hearings on the Environment). The Bureau's core mission is to consult citizens on the environmental, social, and economic impact of proposed policies in order to advise Quebec's environmental ministry. Since 1990, the Bureau has held public hearings on a wide variety of topics, including on the question of shale gas exploitation.

In the mid-2000s, geologists discovered substantial hydrocarbon reserves in the shale deposits of Quebec's Saint Lawrence Lowlands. In 2010, the Environment Ministry of Quebec asked the Bureau to hold a public consultation on the potential impacts of continuing to allow the use of hydrofracturing, the only economical technique for accessing the Province's shale gas reserves. One year later, the Bureau reported that it was unable to fully complete its consultation because "for certain fundamental [scientific] questions, the answers are either incomplete or nonexistent." In response, the Quebec government imposed a moratorium on drilling in June 2011. The continuance of the ban was contingent on the undertaking of an environmental impact study, which informed the Bureau's second series of public consultations in 2013.

Quebec citizens expressed concern in the Bureau's consultation over the dangers of hydrofracturing and, largely on the basis of the Bureau's 2014 final report,^a the Quebec Government decided to permanently ban the practice, effectively stopping the exploitation of shale gas in the Province.

a. BAPE 2014.

3.1.2 Evolution of Civic Engagement

Civic engagement has been guaranteed and otherwise promoted through numerous treaties, statutes, regulations, and voluntary standards. These instruments view civic engagement both as essential to good environmental governance and to good governance. Ironically, as norms and opportunities for civic engagement have increased, some States have introduced new restrictions on the activities of civil society. The 1998 Aarhus Convention⁸ is the leading binding international treaty requiring States to adopt specific measures to ensure civic engagement. In 1998, the countries of the United Nations Economic Commission for Europe adopted the Aarhus Convention. There are 47 Parties to the Convention, which remains open to accession by any state.⁹ The Convention focuses on the twin protections of environmental and human rights, explicitly linking sustainable development with effective

⁸ The full name of the convention is the United Nations Economic Commission for Europe Convention on Access to Information, Public Participation in Decision Making and Access to Justice in Environmental Matters.

⁹ https://www.unece.org/env/pp/ratification.html.

Case Study 3.3: Convening Stakeholders to Plan for Development in Mongolia

The Asia Foundation in Mongolia supported creation of Local Multi-Stakeholder Councils. The Councils are intended to ensure a balanced ecosystem, responsible resource use, and channel the benefits of resource use toward sustainable development. With representatives from mining companies, local governments, and communities throughout Mongolia, the Councils give the public the opportunity to participate in monitoring mines, determine if there are any problems with the mines, and create consensus-based multistakeholder environmental plans for local resource development. Efforts to achieve the latter have generally been successful, with 28 Councils having been established as of 2018.^a

a. Blessing and Daitch 2018.

civic engagement and environmental rule of law. Under the Convention, as a minimum standard, Parties must develop legal frameworks that require: the collection and dissemination of environmental information to the public; the provision of meaningful opportunities for participation in decisions on activities, programs, plans, and policies, as well as in the preparation of laws, rules, and legally binding norms related to the environment; and the creation of specific mechanisms to enable the public to enforce access rights and environmental laws more broadly.¹⁰

Other regional processes are underway to develop tailored legal instruments to operationalize the pillars of Principle 10.11 For example, the Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean was adopted in March 2018.¹² The Organization of American States and the African Union have developed model laws on access to information.¹³ Following consultation with governments and civil society organizations, UN Environment developed the Bali Guidelines to assist States in effectively implementing their commitments to Principle 10 within the frameworks of their national legislation and processes.¹⁴ The 1991 Espoo Convention and its 2003 Protocol on Strategic Environmental Assessment contain significant provisions on

While other multilateral environmental agreements have not historically allowed communications from civil society and the public in general, a growing number have recognized that communications from the public can be a valuable channel of information about parties' noncompliance.

¹⁰ UNECE 2014, 19. In October 2002, through Decision I/7, the first Meeting of the Parties (MOP) established a Compliance Committee to review compliance by Parties with the Convention. To trigger the compliance mechanism, a Party may make a submission about compliance by another Party; a Party may make a submission concerning its own compliance; the Convention secretariat may make a referral to the Committee; or members of the public may make communications concerning a Party's compliance with the Convention. UNECE Decision I/7, paras. 15, 17, 18, October 2002, available at https://www.unece.org/fileadmin/DAM/ env/pp/documents/mop1/ece.mp.pp.2.add.8.e.pdf.

¹¹ See Bruch 2002.

^{12 &}lt;u>https://www.cepal.org/en/regional-agreement-on-access-to-information-public-participation-and-justice-in-environmental-matters-in-latin-america-and-the-caribbean</u>.

¹³ OAS n.d.; African Commission on Human and Peoples' Rights 2012.

¹⁴ UNEP 2010, pt. A; see also UNEP 2015.

Figure 3.3: Benefits of Civic Engagement

Better informed decisions Avoidance of conflicts Increased civil society capacity Public support for government actions Public empowerment Increased monitoring and enforcement Trust between stakeholders Effectiveness of laws

civic engagement in domestic, transboundary, and strategic environmental assessments.¹⁵ And many international trade agreements, such as the North American Free Trade Agreement, contain environmental side agreements that require public consultation in environmental matters.¹⁶

Since the 1992 Rio Earth Summit, domestic laws and regulations have significantly expanded civic engagement in environmental matters. At least half of the countries of the world have adopted legislation guaranteeing access to information in general or environmental information in particular.¹⁷ The rapid growth of national legislation globally on environmental impact assessment has included a wide range of associated information sharing, consultation, and engagement activities at both the domestic and international level.

The Environmental Democracy Index highlights both progress and limitations in the adoption and implementation of legally binding rules ensuring access to environmental information, public participation, and access to justice.¹⁸ For example, the Index shows that while 65 of 70 (93 percent) countries assessed have at least some legal provisions for citizens' rights to environmental information, almost 80 percent of the countries ranked only "fair" or "poor" with respect to laws on public participation.¹⁹

Thus, civic engagement has blossomed from Rio Principle 10 into a multitude of regional and state provisions that form a strong legal basis for civic engagement in environmental governance, but much remains to be done to fully implement these provisions, especially with respect to more substantial forms of civic engagement.

3.1.3 Benefits of Civic Engagement

When implemented well, civic engagement improves both the quality and the legitimacy of the policy process.²⁰ Including civil society in decision making broadens the base of knowledge and expertise, and it can also engage the public in monitoring and enforcement activities, leveraging scarce governmental resources (see Figure 3.3). Perhaps as important, having companies, agencies, and the public work together on critical environmental issues builds relationships and weaves a stronger social

¹⁵ Wates 2005; UNECE 2014.

¹⁶ Bruch 2002.

¹⁷ Banisar et al. 2012.

¹⁸ *See* World Resources Institute and The Access Initiative 2015.

¹⁹ Ibid.

²⁰ For example, a study that tracked the accuracy of environmental and social impact assessments in five transboundary watercourses found a direct correlation between the level of public involvement in the process and the accuracy of the assessment in predicting environmental and social impacts. Bruch et al. 2007b.

fabric—as well as often resulting in more durable environmental protections.

In addition to improved quality and legitimacy of decision making, civic engagement also provides a means for identifying and resolving potential conflicting interests among various groups before they escalate. For example, communities often use a plot of land for various purposes that may not be apparent to a government agency or concessionaire. By surveying the community and engaging them about land uses early in a concession process, public participation may reduce the incidence and severity of land disputes associated with natural resource extraction concessions.²¹ The Munden Project estimates that land disputes can delay and drive up the cost of large-scale extraction projects by a factor of almost 30.22 Engaging the public, and particularly affected communities, can help to address potential concerns about representation both generally in the country and within communities; this reduces the likelihood that arbitrary decisions will be made or makes it more likely that the representatives that claim to speak for communities are legitimate.²³

Civic engagement also raises public awareness of the reasons for and contents of environmental policies and laws, thus building the capacity of civil society to participate meaningfully in monitoring the implementation and enforcement of those laws, and enhancing motivations for compliance. In Indonesia, the Program for Pollution Control, Evaluation, and Rating involves publicizing and engaging the public on companies' compliance with pollution discharge standards, leading to a significant increase in compliance with pollution laws.²⁴ When civil society and the public are excluded, there is a higher likelihood that the decisions will not adhere to key public concerns and priorities and that trust will be undermined by the opacity of the decisionmaking process and the appearance (or actual existence) of a hidden agenda. Moreover, a culture of exclusion, avoidance, and noncompliance fundamentally and significantly hampers the realization of environment-related rights. An example of this can be found in the instance of Vietnamese Laska Pure Water Plant's production and sale of "mineral water." This bottled water was distributed nationally within Viet Nam but not sold in cafes in Hai Duong, where people refused to drink it because they knew the water was in fact river water repackaged as "mineral water." The majority of the country, however, did not have the information important to their own health and safety.²⁵

3.1.4 Civic Engagement Implementation Challenges

The Environmental Democracy Index has found that while there has been substantial progress in enacting laws on civic engagement, challenges remain with implementation and enforcement. For example, data on air and drinking water quality are only publicly available in roughly 50 percent of the countries surveyed, and while all but nine of the countries make at least some of their environmental impact assessments publicly available, only 33 percent do so consistently, as shown in Figure 3.4.

There are three key challenges to practical implementation of civic engagement: implementing regulations, capacity, and political will.

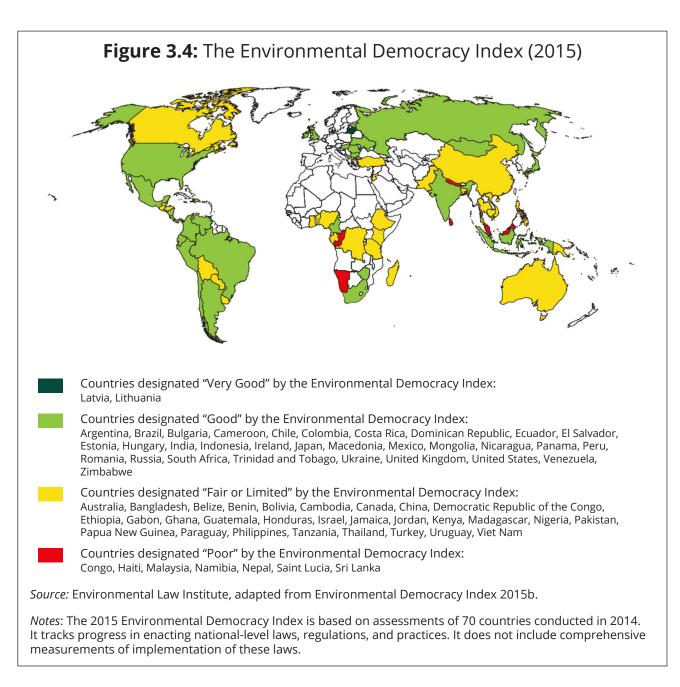
²¹ Jensen 2011, 20.

²² Munden Project 2012, 3.

²³ See Section 3.3.4 infra.

²⁴ Henniger et al. 2002, 58.

²⁵ Ibid., 47.



While most countries have committed through treaties, constitutions, or laws to advancing the three pillars of civic engagement, many countries have not yet adopted the necessary implementing regulations, procedures, and policies to guide agency officials. Without this specificity, civic engagement can devolve into token procedures that do not yield meaningful public participation.

Some countries may support transparency or public participation in particular contexts (such as information on the state of the environment), but have yet to extend it to helping to ensure environmental rule of law. As discussed in this chapter, a growing number of countries are utilizing transparency and public participation to empower the public to know whether there are environmental violations and to act on those violations. This often results in the development of legal requirements that are broadly articulated but narrowly interpreted limiting the practical scope of engagement.

A second key challenge in engaging the public relates to the capacity of government bodies. Often, agencies have limited staff, and they are not adequately trained in how to engage with members of the public, particularly in supporting environmental compliance and enforcement efforts. It can be difficult for public officials to contact traditionally marginalized or vulnerable segments of society and to communicate effectively with them, to determine who are legitimate representatives of local communities, and to find the appropriate fora and techniques to ensure that stakeholders feel free to voice their opinions and participate actively. This is further complicated in situations where there is a history of mistrust between civil society and government or in which opportunities to participate in the past have been manipulated to the disadvantage of certain groups. Many governments seek to address this by designating dedicated public engagement staff and by building the capacity of government officials to engage in meaningful public participation, such as India's requirement that officials be trained under the 2005 Right to Information Act.²⁶

Civil society capacity can also be a challenge. Ongoing efforts to increase the level of participation of civil society have resulted in a certain amount of "participation fatigue," particularly where only a few organizations have the capacity to be involved in environmental decision making. This fatigue is not only felt by organizations, but also by communities that are called to stakeholder engagement meetings which turn out, over and over again, to be a tick-box exercise so that their views are not actually considered. Additionally, in many developing countries, the low level of capacity in civil society means that the same individuals or organizations are involved repeatedly in projects and programs, sometimes resulting in a perception of (or actual) collusion with government.

The third key challenge in many countries and perhaps the most important—is the lack of political will and an entrenched culture of centralized decision making. In countries where there is a tradition of centralized decision making, there is reluctance to share power with subnational governmental units or with the public. This leads to a tendency to consider civic engagement to be a process of building stakeholder buy-in or of public relations and strategic communications aimed at bringing civil society into line with the government's point of view, rather than as a potential check on illegal actions. This can be particularly true for government staff used to making what they consider to be complex decisions requiring a high level of technical understanding. The key to building political will is building official awareness of the value of transparency and public participation to ensuring environmental rule of law.

While public participation engages citizens in government decisions, it is not a replacement for government. Public participation helps support and hold accountable public officials and agencies; it does not substitute for government actions investigating and prosecuting environmental violations.²⁷

The next section discusses access to information, followed by a discussion of public participation.

²⁷ World Bank 2009; Odugbemi and Lee 2011; Ackerman 2005.

²⁶ UNEP 2015, 59.

3.2 Access to Information

Effective and timely access to accurate environmental information is both a cornerstone of civic engagement and a fundamental aspect of environmental rule of law's promotion of transparency and accountability. Broad access to environmental information ensures that civil society is able to understand not only the nature of environmental threats and harms, but also what is required by environmental laws and what their rights are. This knowledge allows citizens to determine when engagement on an environmental issue is necessary and how to respond effectively, including participating in compliance and enforcement actions. Access to information empowers citizens to hold decision makers to account, narrows the space for corruption, and improves environmental governance more broadly.²⁸

The right to access environmental information has evolved at both the international and national levels as an outgrowth of the right to seek, receive, or impart information more broadly. It was enshrined in both article 19 of the 1948 Universal Declaration of Human Rights and article 19 of the 1966 International Covenant on Civil and Political Rights.²⁹ In 2009, the Council of Europe adopted the Convention on Access to Official Documents, which affords explicit protection to the ability to access official documents.³⁰ International courts have held that governments have to provide information upon request, and even have to provide certain information when it has not been requested.³¹ Rights related to accessing information are now recognized to

29 See also UN Human Rights Council 2011.

varying degrees by international and regional human rights regimes around the world.³² Despite the recognition that these rights may be qualified in certain narrow circumstances, the rights ensuring access to information are broadly recognized as critical components of good governance. There is thus a presumption of transparency.³³

Access to information can be either passive or active. Passive access to information is the response by government to requests for information from the public or other stakeholders, such as a request for information from government files. In India, Thailand, and Uganda, for example, data on pollution stemming from industrial facilities can only be obtained from the government with a personal contact.³⁴

Active access means the government makes available information on its own initiative or pursuant to legal mandates, such as publishing annual reports on pollution emitted from facilities or posting concession contracts on the internet. In the United States such information is mandated to be shared under policy initiatives like the United States

34 Henniger et al. 2002, 55.

²⁸ Henniger et al. 2002.

³⁰ https://rm.coe.int/1680084826.

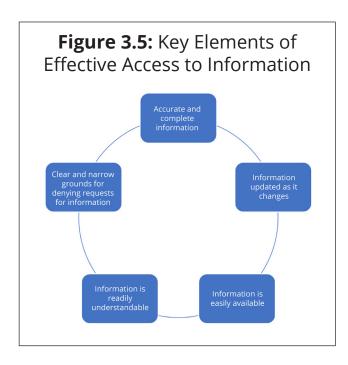
³¹ See, e.g., Judgment by the European Court of Human Rights (second section), Társaság a Szabadságjogokért v. Hungary, Application No. 37374/05, 14 April 2009 Inter-American Court of Human Rights, Claude Reyes v. Chile, 19 September 2006.

³² International Covenant on Civil and Political Rights (1966), art. 19; African Charter on Human and Peoples' Rights (1963), art. 9; European Convention for the Protection of Human Rights and Fundamental Freedoms (1953), art. 10; American Convention on Human Rights (1969), art. 13.

The recognition of a right to information in international human rights law has grown in recent years, and today international human rights bodies such as the UN Human Rights Committee, the European Court of Human Rights, the Inter-American Court of Human Rights, and the European Committee on Social Rights have recognized the existence of a right to information in certain circumstances. This has often happened in the context of the securing of other rights, including both civil and political rights and economic, social, and cultural rights.

³³ World Resources Institute and The Access Initiative 2015.

Toxic Release Inventory.³⁵ States undertake both forms of information sharing, which are discussed in this section.



Key elements of effective access to information are outlined in the Aarhus Convention, Bali Guidelines, the Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean, and State practices and are summarized in Figure 3.5. It is important that information provided be accurate, accessible, and complete and that it includes information on opportunities to participate in government decision making. Without providing complete and accurate information, the project or decision may be reversed in the courts, delaying or negating the project and wasting valuable government resources. For example, the Supreme Court of Jamaica voided a permit issued by the Jamaican Natural Resource Conservation Authority to build a large hotel

after it was revealed that the Authority failed to share a marine ecology report and parts of the environmental assessment.³⁶

In response to requests for information, authorities should be able to make such information available in an affordable, timely, and effective manner without requiring the person requesting the information to state a legal or other interest. For example, in the Republic of Moldova, the Chişinău Court of Appeals held that the government had to provide information about forestry contracts even if the requester did not provide a justification of interest.³⁷

Information provided should be in a language and format that is easy to understand for the people who require it. Translations should be available if the information is needed by indigenous peoples or others. For example, Mexico and Costa Rica both provide assistance to indigenous peoples when language is a barrier to access to information.³⁸

If a request for information is to be denied, the applicable law should provide clear grounds for refusing requests for information, such as a national security or personal privacy consideration. But those grounds should be interpreted narrowly.

Considering the ongoing efforts to improve access to information in practice—both to assist environmental rule of law and more broadly—it is critical to track how agencies actually perform. One such effort is the Strengthening the Right to Information for

³⁶ The Northern Jamaica Conservation Association and Others v. The Natural Resources Conservation Authority and Another (2006), Claim No. HCV 3022 of 2005, <u>http://supremecourt.gov.jm/content/</u> <u>northern-jamaica-conservation-association-et-al-v-</u> <u>natural-resources-conservation-authority</u>.

³⁷ See, e.g., Co-Seed 2017b, 36.

³⁸ See UNEP 2015, 51.

³⁵ Ibid.

People and the Environment initiative.³⁹ The initiative assesses a country's transparency, public participation, and environmental statutes and evaluates what environmental information is and is not available and why. It then works with community members to request information from the government and assesses the government's response. The results are analyzed and used to inform government and the public on ways to increase efficiency and effectiveness of information sharing and to increase capacity of civil society to advocate for environmental information. The initiative has projects ongoing in Indonesia and Mongolia. Efforts like these help reveal where access to information processes are not functioning well in practice, facilitating corrective action. Similar initiatives exist at the national level as well. For example, in South Africa, the Access to Information Network is a network of civil society organizations that cooperate to advance access to information rights for ordinary people in South Africa.⁴⁰

The remainder of this section discusses the legal provisions on access to information and how States provide access to information on environmental conditions; projects and activities affecting the environment; natural resource concessions and revenues; and environmental laws, regulations, and judicial decisions.

3.2.1 National Constitutional and Legal Provisions on Access to Information

Information held by the government is presumed to be accessible to the public,

subject to reasonable restrictions to protect national security, government deliberation, public health, and individual privacy. Access to information provisions in national constitutions and laws have proliferated across the globe, particularly in the past decade. As shown in Figure 3.6, the right of access to information is protected in the constitutions of 96 countries, and 110 countries have access to information provisions in their national laws or actionable decrees; 43 of these laws have been passed since 2007.⁴¹

Legal guarantees of access to environmental information appear in many forms.

Rights to environmental information often emanate from a constitutional guarantee to freedom of information or are embedded in national legislation governing access to information more broadly. For example, some States, such as Finland, New Zealand, South Africa, and Mexico, explicitly recognize the constitutional right of access to information.⁴² Others, such as India and the Republic of Korea, have recognized constitutional rights that address access to information within constitutional guarantees to the right to life, expression, or the right to a healthy environment.⁴³ Additionally, some States incorporate a citizen's right of access to information through reference to a global or regional document, such as the African Charter on Human and Peoples' Rights or the Universal Declaration of Human Rights.⁴⁴

The constitutional right to information may not be sufficient to actually effectuate a right. In some countries, certain constitutional rights are not justiciable and therefore a citizen will not be able to enforce the right against the government unless there is implementing

44 Ibid.; Bruch et al. 2007a.

^{39 &}lt;u>http://www.accessinitiative.org/get-involved/</u> <u>campaigns/strengthening-right-information-people-</u> <u>and-environment</u>.

^{40 &}lt;u>http://www.saha.org.za/projects/national_paia_civil_</u> society_network.htm.

⁴¹ Open Society Justice Initiative 2016.

⁴² UNEP 2006, 54.

⁴³ Ibid.

legislation. In several countries, high courts have ruled that constitutional rights to information are enforceable despite the lack of an implementing law.⁴⁵

Countries that provide a right to environmental information through the constitution may do so through either substantive or procedural rights or both.⁴⁶ Substantive rights are rights relating directly to human health or the environment, while procedural rights are rights to procedures, such as access to information, that support substantive rights and environmental rule of law. The realization of a constitutional right to a healthy environment depends on the ability of individuals, communities, civil society organizations, companies, and decision makers to access information about the state of the environment and the impact of human activities. Brazil's constitution, for example, protects the substantive right "to an ecologically balanced environment" and also demands that the government "ensure the effectiveness of this right," including the obligation to demand and make public environmental impact studies, which is a procedural right.⁴⁷ Almost three dozen countries have included procedural rights related to the environment in their constitutions since the enactment of the Aarhus Convention.⁴⁸ Iceland's constitution provides that "[t]he public authorities shall inform the public on the state of the environment and nature and the impact of construction thereon. The public authorities and others shall provide information on an imminent danger to nature, such as environmental pollution."49

A growing number of countries are including specific provisions in environmental framework laws, in resource-specific laws, or even as separate environmental information legislation. For example, Mexico's *Ley General del Equilibrio Ecológico y la Protección al Ambiente* (General Law of Ecological Balance and Environmental Protection) requires the national government to promote public access to information regarding the planning, implementation, evaluation, and monitoring of environmental and natural resource policy.⁵⁰

Even absent explicit constitutional or statutory provisions that define rights to environmental information, courts may still find the right to exist. The Inter-American Court of Human Rights affirmed the fundamental status of the right of access to information in a landmark case by determining that there is a presumption of disclosure and that failure to disclose environmental information must be in accordance with legally stipulated restrictions.⁵¹ In the absence of a national law providing such restrictions, the court demanded disclosure of the information.

3.2.2 Access to Information on the State of the Environment

Environmental rule of law requires an informed citizenry that can identify environmental problems and rights, help set environmental priorities, and track environmental progress. The provision of periodic reports on domestic environmental quality, including sectoral information on air quality, water quality, and the status of natural resource management, helps achieve these

⁴⁵ Right2Info 2012.

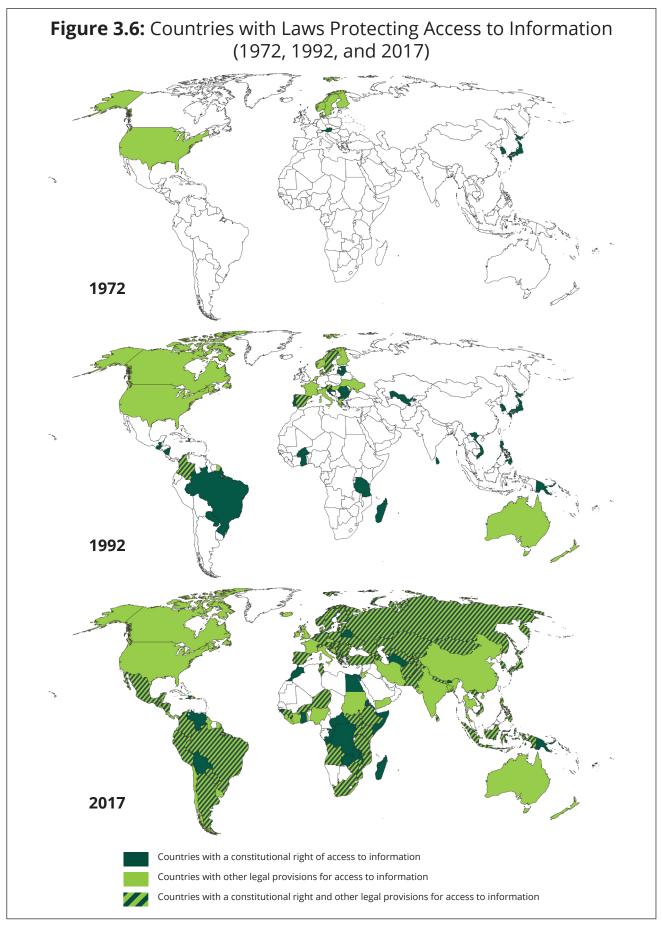
⁴⁶ *See* the Rights Chapter of this Report for a discussion of substantive and procedural rights.

⁴⁷ Constitution of Brazil 1988, art. 225; Daly 2012.48 May 2013.

^{49 &}quot;A Proposal for a New Constitution for the Republic of Iceland" 2011, art 35. <u>http://stjornlagarad.is/</u> <u>other_files/stjornlagarad/Frumvarp-enska.pdf</u>.

⁵⁰ La Cámara de Diputados del Congreso de la Unión 1996, secs. 157-159; Environmental Rights Database 2015

⁵¹ Claude Reyes et al. v. Chile. Series C No. 151. Inter-American Court of Human Rights. Chile. 2006.



Year	Countries with a constitutional right of access to information	Countries with other legal provisions for access to information	Countries with a constitutional right and other legal provisions for access to information
1972	Austria, Japan, Malta, Republic of Korea	Denmark, Finland, Norway, Sweden, United States	
1992	Brazil, Bulgaria, Burkina Faso, Cabo Verde, Croatia, Estonia, Ghana, Guatemala, Haiti, Japan, Latvia, Lithuania, Madagascar, Malta, Nicaragua, Papua New Guinea, Paraguay, Philippines, Portugal, Republic of Korea, Romania, Slovakia, Slovenia, Sri Lanka, The former Yugoslav Republic of Macedonia, Uzbekistan, Viet Nam	Australia, Canada, Denmark, Finland, France, Greece, Hungary, Italy, Netherlands, New Zealand, Norway, Ukraine, United States	Austria, Colombia, Spain, Sweden
2017	Belarus, Bhutan, Bolivia, Cabo Verde, Central African Republic, Congo, Costa Rica, Democratic Republic of the Congo, Egypt, Eritrea, Fiji, Ghana, Guinea-Bissau, Haiti, Madagascar, Malawi, Maldives, Morocco, Papua New Guinea, Seychelles, Somalia, Turkmenistan, Venezuela, Zambia	Antigua and Barbuda, Australia, Bangladesh, Belize, Bosnia and Herzegovina, Canada, Chile, China, Côte d'Ivoire, Czech Republic, Denmark, El Salvador, France, Guyana, Iceland, India, Iran, Ireland, Italy, Jamaica, Jordan, Liberia, Liechtenstein, New Zealand, Nigeria, Panama, Saint Vincent and the Grenadines, Sierra Leone, Sudan, Thailand, Togo, Trinidad and Tobago, United Kingdom, United States, Uruguay, Yemen	Afghanistan, Albania, Angola, Argentina, Armenia, Austria, Azerbaijan, Belgium, Brazil, Bulgaria, Burkina Faso, Colombia, Croatia, Dominican Republic, Ecuador, Estonia, Ethiopia, Finland, Georgia, Germany, Greece, Guatemala, Guinea, Honduras, Hungary, Indonesia, Japan, Kazakhstan, Kenya, Kyrgyzstan, Latvia, Lithuania, Malta, Mexico, Mongolia, Montenegro, Mozambique, Nepal, Netherlands, Nicaragua, Niger, Norway, Pakistan, Paraguay, Peru, Philippines, Poland, Portugal, Republic of Korea, Republic of Moldova, Romania, Russia, Rwanda, Serbia, Slovakia, Slovenia, South Africa, South Sudan, Spain, Sri Lanka, Sweden, Switzerland, Tajikistan, Tanzania, The former Yugoslav Republic of Macedonia, Tunisia, Turkey, Uganda, Ukraine, Uzbekistan, Viet Nam, Zimbabwe

Source: Environmental Law Institute, based on data from the Open Society Justice Initiative's Right2Info database (September 2016), the Centre for Law And Democracy and Access Info Europe's Global Right to Information Rating database (September 2016), and countries' constitutions available from the University of Texas at Austin's Constitute database (September 2013).

Notes: This map highlights countries with provisions in laws and constitutions for the right to information; it does not aim to indicate the strength, effectiveness, or application of the aforementioned provisions. On India: The Preamble to India's 1950 Constitution was interpreted as providing for the right to information in a Supreme Court case. India is included as having the constitutional right to access to information in the 2017 map because this case was decided in 2005.

goals. Bali Guideline 5 provides that "States should periodically prepare and disseminate at reasonable intervals up-to-date information on the state of the environment, including information on its quality and on pressures on the environment."52 Moreover, the UN has recognized a human right of access to information, including environmental information.⁵³ Unfortunately, States have a poor record of actually producing this information: according to the Environmental Democracy Index, only 20 of 70 countries reviewed, or 29 percent, are ranked as "good" or "very good" in producing a regular, comprehensive, and current "State of the Environment" report.54

Periodic reporting of environmental conditions is critical to allow government and the public to judge the current status of environmental and human health, the efficacy of the existing legislative framework in addressing environmental priorities, and whether enforcement and compliance efforts need to be improved or the legal framework adjusted. To this end, many States engage the public to develop environmental indicators to report on the status of the environment.

Many States have developed environmental indicators and compile state-of-theenvironment reports. While state-of-theenvironment reports traditionally have been published documents, some countries are moving to digital reporting of environmental quality by digitizing periodic reports as well as providing environmental data in real time. For example, Tunisia has created the Tunisian Observatory for Environment and Sustainable Development as a dashboard to monitor data on the state of the environment and sustainable development.⁵⁵ Jordan is creating the Jordan Environmental Information System to track the state of the environment in Jordan and "to raise environmental awareness and facilitate decision-making processes."⁵⁶ And the United States has the MyEnvironment website, which gives users a snapshot of environmental indicators in their area.⁵⁷

3.2.3 Access to Information on Projects and Activities Affecting the Environment

Myriad national statutes and regional and international treaties require the public to have access to environmental information on projects that affect the environment. In addition, as mentioned above, there is a human right to access to information, including environmental information. Access to such information helps ensure that the public knows about projects that can affect their livelihoods, health, and welfare. After reviewing the information, they can decide whether they want to get involved, and how. Informed public participation is a critical check on projects to ensure that they comply with the necessary standards and procedures. Whether due to lack of capacity, corruption, or other factors, government agencies might not be able to properly determine if a proposed project or activity fully complies with the law. Making information available to civil society organizations, citizens, and other actors can help vet the proposed project or activity.

The most common form of information on the environmental effects of a proposed project is an environmental impact assessment. While public access to assessments has

⁵² Bali Guideline 5. Aarhus Convention, article 5.4, has a similar requirement.

⁵³ UN 2011.

^{54 &}lt;u>http://www.environmentaldemocracyindex.org/</u> <u>map#1/5</u>.

^{55 &}lt;u>http://www.environnement.gov.tn/index.</u> php?id=127&L=1#.WbhNBNFrw2x.

^{56 &}lt;u>http://climateobserver.org/wp-content/</u> uploads/2015/06/EEA_Jordan.pdf.

⁵⁷ https://www3.epa.gov/myem/envmap/find.html.

many benefits,⁵⁸ our focus here is on how access supports the environmental rule of law. Since 1970, with the enactment of the U.S. National Environmental Policy Act, over 185 countries have required environmental assessments for projects and activities that may have a significant environmental impact (see Figure 3.15).⁵⁹ This has broadened over time to include processes such as transboundary environmental assessment, which examines environmental impact across national boundaries; strategic environmental assessment, which examines environmental impact and implications of policies, plans, and programs; environmental and social impact assessment; and, in certain instances, human rights impact assessments.⁶⁰ The International Court of Justice has held that general international law requires States to undertake environmental impact assessments in transboundary situations that might cause environmental harm,⁶¹ and the UN has shown that international human rights law requires that an environmental impact assessment be conducted when a project might cause environmental harm that might interfere with human rights.62

As countries have gathered experience with environmental impact assessment, they have realized the importance of making available as soon as practicable:

 the fact that a project has been proposed or is under consideration;

62 UN Human Rights Council 2015.

- both the draft and final assessments;
- the information relied upon in the assessments;
- changes to information or proposed decisions during the assessment process; and
- information considered but not relied upon in the assessments.

Making such information about a project available to the public early in the process can help to identify early on whether there are any inconsistencies with required standards or processes, allowing for revision of the project. It can also increase public acceptance and decrease costs of a project, as discussed in Case Study 3.4.

In order to determine if a project complies with the required environmental standards and procedures, it is necessary that information on the project (for example, project documents and the environmental impact assessment) be made public.63 Increasingly, countries are creating online portals of environmental impact information to facilitate access. Europe now mandates that each Member State set up a central portal or a point of access in order to grant the public access to the relevant information relating to an environmental impact assessment in an easy and efficient way and that information be included as soon as the information can reasonably be provided.64

Public scrutiny—and environmental rule of law—is enhanced if civil society and the public are aware of the availability of the information. As a result, most environmental assessment regimes require notification that an environmental assessment is available in the national register of government activities, through publication in local

⁵⁸ Odparlik and Köppel 2013; Banisar 2012.

⁵⁹ As of 2017, 123 have stand-alone legal instruments governing environmental impact assessment, and another 64 countries had legal provisions on EIAs included in other legal instruments. *See also* UN Environment 2018; Banisar 2012, 11. Greenland, a semi-autonomous country, also has a legal framework governing environmental impact assessment.

⁶⁰ *See, e.g.*, Troell et al. 2005; Therivel 2010; Barrow 1997; Harrison 2011.

⁶¹ International Court of Justice, Pulp Mills on the River Uruguay (Argentina v. Uruguay), April 20, 2010.

⁶³ UN Environment 2018.

⁶⁴ EIA Directive, art. 6(5).

Case Study 3.4: Public Participation in the Permitting of a Hazardous Waste Storage Facility in Hungary

Dunaferr Ferromark, a company operating a hazardous waste storage facility in Hungary, applied for a permit to establish a permanent facility in Dunaujvaros, where it had previously operated under a provisional license. Pursuant to legislative requirements, the company prepared an environmental performance evaluation, which was adopted by the local environmental authorities and sent to the Mayor's office for public notification. The document shared with the public for 30 days, during which members of the public were invited to comment, and following which a public hearing was held. At the hearing, local citizens, environmental groups, other authorities, and others participated. They raised a number of concerns, including:

- whether the environmental impact assessment procedure had been followed correctly;
- whether the siting of the facility followed local zoning regulations; and
- whether the company had adequately researched impacts on groundwater streams and soil filtration.

Following these concerns, the environmental agency considered the comments and addressed them in its final decision granting the permit.^a

a. <u>http://www.unece.org/fileadmin/DAM/env/pp/ecases/HO_08.PDF</u>.

newspapers, or by posting notices on relevant government agency websites.⁶⁵ Practices across countries differ, but Estonia's environmental assessment law requires that once a government agency decides that an environmental assessment process will be triggered, the agency must create a summary of the project and the assessment process and give notice to environmental nongovernmental organizations.⁶⁶

Reviews of country practices suggest room for improvement in making information on environmental assessments available to the public early in the process and at

65 Banisar et al. 2012; UN Environment 2018.

low cost.⁶⁷ For example, in one study, less than 20 percent of countries reviewed provided public notice of draft environmental assessments and made them available to the public.⁶⁸ While only one country charged a fee to view environmental assessment documents, about half charged a fee to obtain copies of the documents.⁶⁹

⁶⁶ CO-SEED 2017a.

⁶⁷ UNEP 2018.

^{68 &}lt;u>https://www.elaw.org/elm/eia-access-to-information</u>.

⁶⁹ Ibid.

3.2.4 Access to Information on Natural Resource Concessions and Revenues

Many countries are blessed with substantial environmental endowments—an abundance of minerals, fertile land, forestry, and other resources. Rather than being a blessing, though, these resources often provide an incentive for economic and political elites to try to capture the resources and their revenues for personal gain. This "resource curse" is well documented, and characterized by non-transparent, nonparticipatory, and thus non-accountable decision making—and thus may result in rent seeking, corruption, and conflict.⁷⁰ With social (or even armed) conflict, there is also an increase in attacks on community advocates and environmental defenders and restrictions on participatory rights.⁷¹

Efforts to fight the resource curse have focused largely on improving access to information regarding natural resource concessions and the revenues derived from them.⁷² Multiple agencies often play a role in reviewing and granting natural resource licensing, and then in monitoring compliance with environmental laws and with the concession agreements. With access to information about the concessions, their operations, government revenue derived from them, benefits to host communities, and management of such revenue, local communities and civil society can help track compliance. And with a more informed and engaged populace, the government and concessionaires have an additional incentive for ensuring that all the relevant rules are adhered to.

Natural resource concessions are often critical economic drivers for regions and countries. Their management involves many environmental laws and regulations relating to natural resource extraction, air pollution, water pollution, local content, community rights and safeguards, worker safety, and other issues. These laws are often managed by different offices within ministries and by diverse ministries, meaning that it can be challenging to coordinate monitoring of concessions to ensure their compliance with law and their overall impact on communities and the environment. Mandating that information on environmental and social factors be collected and made available to the public helps ensure that all ministries and their subdivisions have access to the information that they need, instead of the information remaining within just one office; helps inform the public about conditions and compliance; and empowers civil society to help monitor overall concession performance.

Many concessionaires find that making information publicly available helps operations by increasing public support and building goodwill with local communities.73 The Extractive Industries Transparency Initiative is a coalition of countries, natural resource extraction companies, and civil society organizations. It has developed a framework for promoting transparency in the mining, oil, and gas sectors, which relies on reporting and auditing payments made by natural resource companies to governments.74 Countries become Initiative-compliant through a multi-year process during which the Initiative reporting and auditing framework is adopted into law, as noted in Case Study 3.5. As of 2016, at least 29 countries are compliant with the Extractive Industries Transparency Initiative, and 43 countries have published revenues totaling US\$2.4 trillion (see Figure

⁷⁰ Auty 1993; Ross 2004; Ross 2015.

⁷¹ See Chapter 5 (Rights) infra.

⁷² Epremian, Lujala, and Bruch 2016.

⁷³ Rustad, Le Billon, and Rustad 2012.

⁷⁴ Ernst & Young 2013, 3.

3.7).⁷⁵ Some countries have used the Initiative to govern other natural resources, as explained in Case Study 3.5.

Increasingly, countries require disclosure of concession contracts to increase transparency and accountability, and thereby promote environmental rule of law. Without access to the contracts, the public may not know the actual boundaries of the concession or the legal requirements it has to meet. Liberia was a pioneer in making public its natural resource concession contracts; since then, many countries have also made public their contracts. As seen in Figure 3.8, a 2017 review of contract disclosure practices related to oil, gas, and mining of 51 countries found that over half have disclosed some of their contracts.⁷⁶ However, 20 of the countries have not published any contracts or licenses or have not passed a contract disclosure law. And 11 countries have failed to make contract disclosures mandatory under national laws. The study authors noted that "[e]ven in countries where contract disclosure is an established practice, it remains challenging for citizens to determine which contracts or licenses apply to active extractive operations. Broken websites and the use of inappropriate file formats hinder access and can make analysis all but impossible."77

This reinforces the finding that the best aspirations, even when enshrined in the law, can be foiled without careful implementation steps. Resources such as www.resourcecontracts.org, a platform upon which countries can post their contracts, may help by providing a technology infrastructure. Sierra Leone, the Philippines, and Tunisia are using such platforms.⁷⁸ In addition, experts recommend that documents be posted online in open data file formats instead of image files, so that they can be more easily searched, and that files include metadata (summary information such as contract title, contracting parties, signing date, and commodity being exploited) thus allowing the documents to be better organized.⁷⁹

The Extractive Industries Transparency Initiative demonstrates that international standards established through likeminded governments, companies, and civil society organizations can provide strong complementary tools to traditional government enforcement mechanisms. The Roundtable on Sustainable Palm Oil, Forest Stewardship Council, the Kimberley Process, and other initiatives are other examples.⁸⁰ Such initiatives can help hold companies and countries accountable to both domestic laws and international norms, as discussed in Case Study 3.6.

Thus, over the past decade, many countries have undertaken to make natural resource concessions much more transparent to the public. National laws, contract disclosure, and voluntary initiatives offer many options for countries to pursue.

3.2.5 Access to Information on Emission Data, Permits, and Audits

Access to information is important in ensuring compliance with pollution standards. Making emissions data, permits, and environmental audits available to the public allows government, civil society, business, and the public to track pollution through its lifecycle, call for emissions reductions where appropriate, and to hold those who emit hazardous substances accountable for any damage done. It is particularly important for

⁷⁵ See <u>https://eiti.org/</u>.

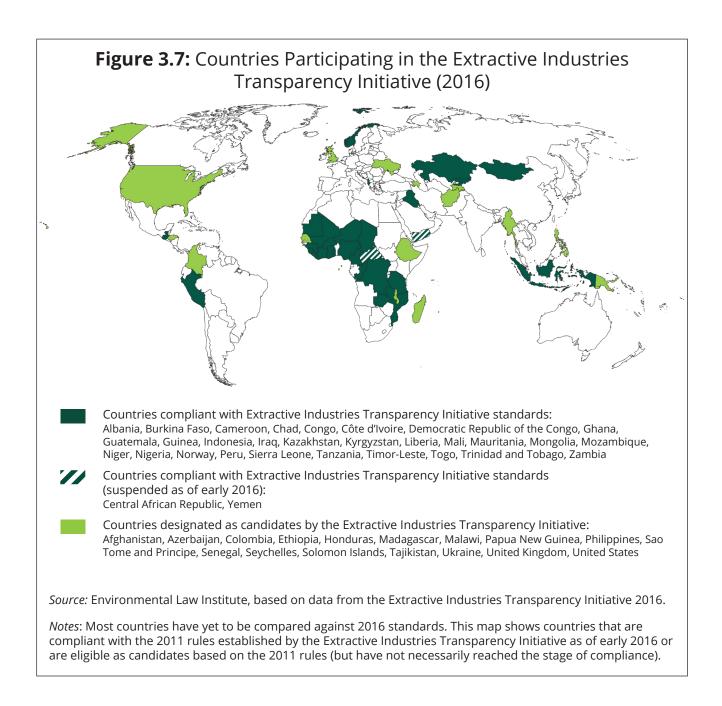
⁷⁶ Hubert and Pitman 2017.

⁷⁷ Ibid.

⁷⁸ OGP 2016.

⁷⁹ Hubert and Pitman 2017.

⁸⁰ Bruch and Broderick 2017.



people living near polluting facilities to ensure that the facilities are complying with the law and their permits. The mandatory reporting of a facility's pollutant emissions is also a highly effective way to encourage voluntary pollution reduction.⁸¹ While some countries required such information to be made public in the 1970s, the widespread global movement toward transparency of pollution information was born out of a tragedy in the 1980s. After a 1984 release of methyl isocyanate killed thousands and maimed tens of thousands more in Bhopal, India, countries began requiring companies to publicly report information on dangerous chemicals stored

⁸¹ UNEP 2015, 47.

Case Study 3.5: Transparency Initiatives in the Liberian Forest Sector

Forests have played a central role in Liberia's recent history. In the late 1980s, Liberia dissolved into a civil war. While the exploitation of forest resources was not the explicit cause of civil war, it helped prolong it by financing participants in the conflict. As the war proceeded, accountability in the timber industry deteriorated. Records—including for financial transactions between the government and timber contractors—were no longer kept. Forest access roads were built and trees harvested without regard to ecological consequences. The lack of accountability enabled corporations to evade taxes and fees (companies were exporting larger quantities of timber than they were reporting to the government). The government mismanaged and misallocated timber revenues. Liberian timber became a major source of financing for the civil war. As a result, in 2003 the United Nations Security Council issued Regulation 1478, which prohibited UN Member States from importing logs from Liberia.^a

After a peace agreement was signed in 2003, Liberia sought to restore the rule of law to the forestry sector. The Liberia Forest Initiative was convened to help the Liberian Government establish sustainable use of forest resources and to promote transparency in the forestry sector.^b In 2006, the Liberian Government adopted the National Forestry Reform Law and a series of implementing regulations. In order to promote transparency and accountability in the forestry sector, the law requires companies that engage in logging to publish their payments to the government and requires the Forestry Development Authority to regularly audit and monitor the forestry contracts, produce an annual enforcement report, and enforce a chain-of-custody system for all timber products.^c

In 2007, Liberia joined the Extractive Industries Transparency Initiative.^d Although the Initiative usually focuses on the oil, gas, and mining sectors, Liberia decided to become the first country to incorporate its forestry sector into this process (as well as its rubber sector). Initiative-compliant countries must demonstrate satisfactory levels of information disclosure and provide evidence that there is a functional process to improve transparency, even if the country does not have a fully transparent sector.^e Liberia has been compliant since 2009.

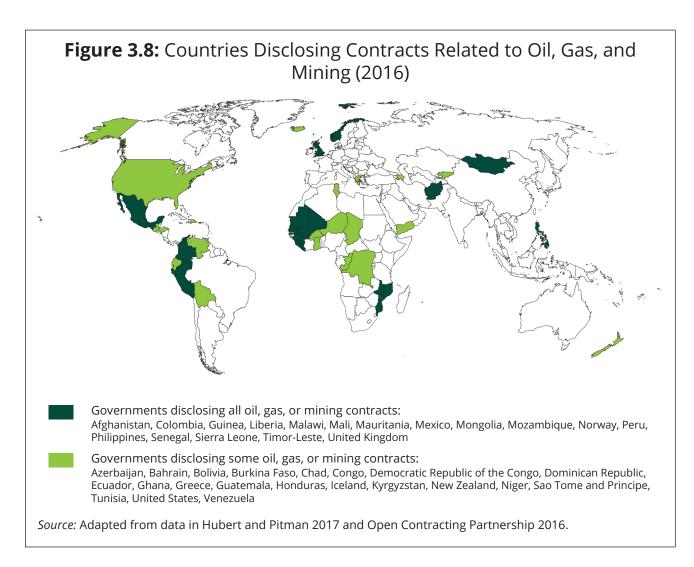
a. Altman, Nichols, and Woods 2012, 339–344.

b. Ibid., 342.

c. National Forestry Reform Law of 2006, secs. 3.4, 5.8, 8.4, 20.11. The chain-of-custody system is an effort to ensure that all timber products originating in Liberia are of legal origin. It employs a labeling system that enables all logs to be traced from its stump to the port of export. Liberia Forest Development Authority Regulation 108-7.

d. Rich and Warner 2012.

e. Extractive Industries Transparency Initiative 2016.



onsite, routine emissions of pollutants, accidental releases of substances, and other environmental data about their facilities.⁸² This was done through a combination of pollutant release and transfer registers⁸³ and regular reporting of emissions. Testing and reporting of emissions of specific pollutants to the air, water, and soil allows the government and—through access to information requirements—the public to determine whether regulated facilities are complying with the law and with their permits.⁸⁴

The information gathered and made public through the pollutant release and transfer registers can shed light on compliance with permits and other requirements, demonstrating the effectiveness, or ineffectiveness, of current pollution control laws.⁸⁵ This practice of shining light on the management and release of hazardous substances and pollutants resulted in significant reductions in the use, emissions,

⁸² UNITAR 2017, 3.

⁸³ For more information on pollutant release and transfer registers, see Sullivan and Gouldson 2007.

⁸⁴ UNITAR 2017, 3.

⁸⁵ UNECE 2014, 115.

and releases of such chemicals. In addition to concerns about compliance, facility operators did not want the negative public attention brought about by discussion of such information. Many facility operators also discovered significant cost savings upon implementing pollution reduction efforts.⁸⁶

As shown in Figures 3.9-3.10, maintenance of pollutant release and transfer registers has become standard in over 45 countries worldwide, with several other countries developing registers.87 China has taken initial steps toward establishing a registry system as well.88 The UNITAR Chemicals and Waste Management Programme supports national efforts to implement Pollutant Release and Transfer Registers.⁸⁹ Regional efforts at harmonizing national registries are also underway using the 2003 Kyiv Protocol (to the Aarhus Convention) on Pollutant Release and Transfer Registers. This Protocol is open to accession by any UN Member State and as of August 2018 has 36 Member States plus the European Union.90

It can be difficult for citizens to access permits and audits of facilities in their neighborhoods. Recognizing that such information is particularly important to people whose health and livelihoods may be affected by polluting facilities, a growing number of countries

Case Study 3.6: Mutually Assured Open Government

The Open Government Partnership is a multilateral initiative that secures concrete commitments from governments to promote transparency, empower citizens, fight corruption, and harness new technologies to strengthen governance. The Partnership has 75 member countries and a board comprising civil society and government officials. Each country has committed to an action plan, and collectively the member countries have made over 2,500 commitments to expand openness and accountability. These commitments include ambitious undertakings. Indonesia has made an impressive commitment to develop the "One Map Portal," which will digitize data and information related to forests on a single portal base map for the use of all sectoral ministries dealing with land tenure, land concessions, and land-use licensing.^a Ghana has committed to building a strong legislative framework to manage oil revenues and to promote the independence of the committee that will monitor the use of such revenues.^b

b. <u>https://www.opengovpartnership.org/</u> <u>countries/ghana</u>.

make available facility permits, government audits of facilities, and any reports on their emissions or compliance status. For example,

⁸⁶ Ibid.

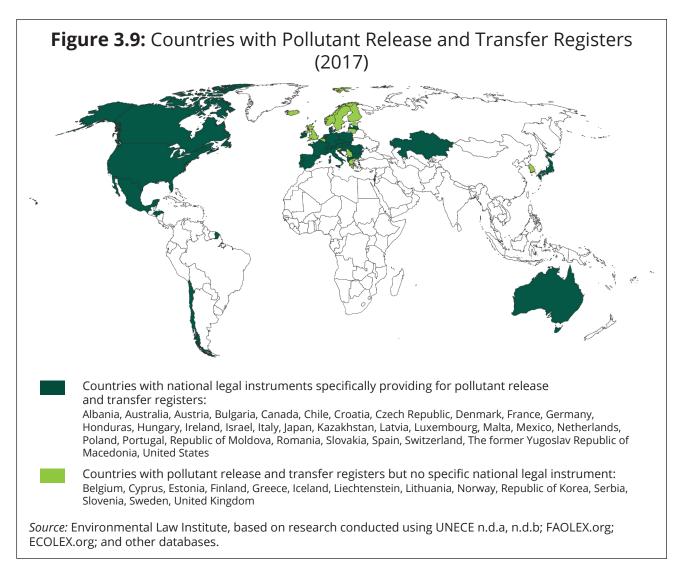
⁸⁷ UNEP 2015, 47. As of early 2018, 32 countries have national legal instruments specifically providing for pollutant release and transfer registers, 14 countries have such registers but do not have national legal instruments specifically providing for them, and at least 13 countries— Armenia, Belarus, Belize, Bosnia and Herzegovina, Cambodia, Ecuador, Georgia, Guatemala, Montenegro, Peru, Tajikistan, Thailand, and Ukraine—were developing registers.

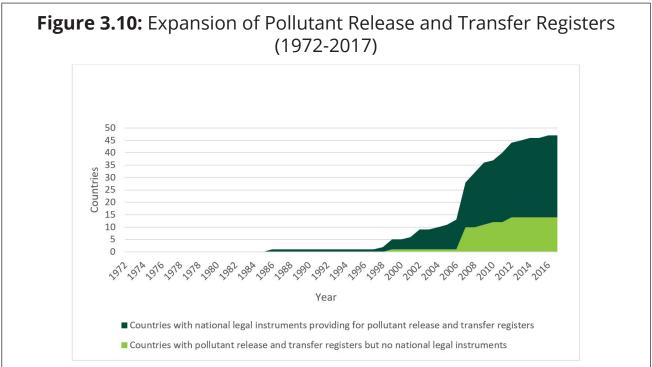
⁸⁸ Ibid.

⁸⁹ http://prtr.unitar.org/site/home.

^{90 &}lt;u>https://www.unece.org/env/pp/prtr.html</u>. For more information on setting up registers, see <u>https://</u> <u>www.unece.org/env/pp/prtr.guidancedev.html</u> and <u>http://www.oecd.org/chemicalsafety/pollutant-</u> <u>release-transfer-register/</u>.

a. Open Government Partnership, Indonesia: One Map Policy.





the U.S. Environmental Protection Agency has created the Enforcement and Compliance History Online database. This website provides pollution-control compliance and enforcement information for approximately 800,000 registered facilities holding permits from the Agency.⁹¹ The tool provides helpful information to the public as well as others looking to vet a company seeking permission to set up operations in another community (whether in the United States or abroad) to see if it has a record of compliance or a record of serious environmental violations.⁹²

3.2.6 Access to Information on Laws, Regulations, and Judicial Decisions

Access to information on environmental laws, regulations, and judicial decisions advances the environmental rule of law in three key ways.

First, the companies and people who are inclined to comply with the law need to know what is required. For example, many dry cleaning facilities use perchloroethane, a toxic solvent that is regulated by many States. In the United States, the U.S. Environmental Protection Agency developed a strategy to improve compliance with the requirements governing the use of perchloroethane.⁹³ The strategy emphasized outreach to the tens of thousands of small dry cleaning businesses across the country to raise awareness of the requirements and provide information on how they could comply with the law. Recognizing that many dry cleaners did not speak English as their first language, the strategy called for the Agency to translate the outreach materials into Korean, Spanish, and other key languages.

Second, access to information on the laws and regulations are important for the institutions and people involved in monitoring, enforcing, and adjudicating potential violations. The range of institutions and people needing this information include government agencies, local authorities, nongovernmental organizations, communities, and citizens. Knowing what the law requires facilitates determining if there has been a violation. For example, it is not uncommon to find judges in some countries who lack effective access to or knowledge of their country's environmental laws, which makes it difficult to effectively adjudicate claims of violations, whether those claims are made by the government or others. Thus, a critical component of judicial training is often providing judges with copies of their country's environmental laws and regulations.94

Third, information on judicial decisions can both motivate and facilitate compliance. In the environmental context and elsewhere, prosecutors and environmental agencies often advertise successful prosecutions. They provide information to the press, through professional associations, and directly to the regulated community to inform them of the requirements, the penalties for violation, and the government's commitment to upholding the environmental rule of law. This can provide regulated entities with a powerful incentive to comply. Information on judicial decisions also empowers prosecutions. In common law countries, judicial precedent of higher courts can be legally binding. Even where judicial decisions are not binding, they can illustrate arguments that can be successful, especially in cases of first impression. The importance of making judicial decisions widely available in writing is discussed further in Section 5.3.4.

⁹¹ USEPA 2015a.

⁹² UNEP 2006, 396.

⁹³ USEPA 1996.

⁹⁴ For more information on judicial training, see Case Study 2.6.

The internet has transformed the ability of countries to affordably make public information on their environmental laws, regulations, and judicial decisions. Many countries make their laws available on the internet, which has been a tremendous boon. But even a cursory review of such sites⁹⁵ reveals major qualifications to this statement:

- some sites require payment to access full text of statutes;
- some sites only provide access to "major" laws;
- some sites only have laws passed after a relatively recent date, such as 2004; and
- some sites only make available unofficial versions of the laws.

Moreover, the people who most need this information—the most marginalized groups in society and people living in rural, far-flung areas—often do not have functional access to the internet.

Many of the same practices arise in making national environmental regulations available online. Often the official gazette, which shows recent amendments to regulations can be found, but it is not possible to find an upto-date version of the complete regulation that is in force at that moment. This means that lawyers and non-lawyers alike seeking to understand regulations may not know how to find the current, official version of the regulations that are in force. This problem often bedevils government officials as much as civil society and the public.

Notwithstanding these difficulties, the internet is a powerful platform enabling innovative access to information on environmental laws, regulations, and judicial decisions. In Kenya, the Judiciary administers the Kenya Law site, "where legal information is public knowledge."⁹⁶ Laws, judicial decisions, and the official gazette as well as other resources, although not government regulations, are freely available on the website. In Croatia, the Ministry of Environment and Nature has created a website that includes all laws and regulations within the Ministry's jurisdiction.⁹⁷

It also is increasingly common for courts, especially high courts, to establish websites where the public can search and access judicial decisions and other relevant information. For example, the Supreme Court of the Philippines website features an online library of judicial decisions and resolutions, recordings of oral arguments, and annual reports.⁹⁸

Several international websites make available national environmental and natural resource statutes. ECOLEX,⁹⁹ discussed further in Case Study 2.7, provides an excellent collection of environmentally related treaties, laws, and judicial decisions; and FAOLEX¹⁰⁰ provides a vast collection of treaties, laws, and decisions relating to renewable natural resources.

In sum, States have made tremendous strides in recognizing the need to both respond to requests for environmental information and to actively make environmental information available to citizens. Many are making innovative use of the internet to widely publicize the state of the environment, publish important environmental information, share natural resource concession data, and make available foundational laws, regulations, and judicial decisions. But it is also clear that performance in response to requests for information and in keeping information up-to-

99 <u>https://www.ecolex.org/</u>.

^{95 &}lt;u>http://eur-lex.europa.eu/n-lex/related_links/related_links_en</u>.

⁹⁶ http://kenyalaw.org/kl/.

⁹⁷ http://www.mzopu.hr.

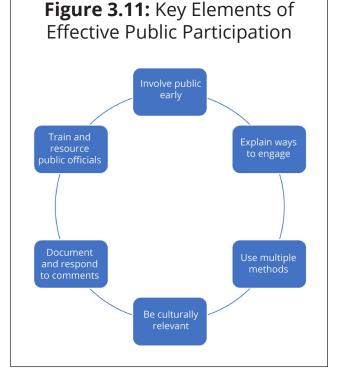
^{98 &}lt;u>http://sc.judiciary.gov.ph/</u>.

¹⁰⁰ http://www.fao.org/faolex/en/.

date and easily accessible is uneven across the globe and even across agencies within a state.

3.3 Public Participation

Public participation is important both as a means to ensure environmental rule of law and as a context for environmental rule of law.¹⁰¹ Public participation in inspection, monitoring, and enforcement of environmental law helps to ensure that the laws are complied with and enforced. Given the many governance benefits of public participation—public participation incorporates local knowledge into environmental decisions, builds public support for projects, and helps to hold actors accountable to their decisions and actions—many countries establish procedural requirements in their environmental laws that require government agencies to inform, consult with, seek feedback from, and meaningfully consider feedback from citizens.¹⁰² Many global and regional instruments enshrine the right to participate in decision making, both generally and in the environmental context.¹⁰³ As such, environmental rule of law requires public



participation both as a practical matter and as a legal matter.

Providing access to information is a necessary first step in civic engagement, but it has limited meaning unless people can act on that information by participating in processes to craft laws and regulations, review permits, assess environmental impact, monitor compliance, and help enforce environmental laws. This section discusses public participation as a means of enhancing environmental rule of law.

Drawing on decades of study and experience, scholars and practitioners have identified several elements of effective public participation, which are explained below and summarized in Figure 3.11. In addition, private standards, such as the Global Reporting Initiative,¹⁰⁴ provide indicators on conducting meaningful stakeholder engagement.¹⁰⁵

¹⁰¹ Adomokai and Sheate 2004.

¹⁰² In addition to domestic legislation, international environmental law and international human rights law contain several provisions promoting or requiring participation in government and governmental processes. These include, for example, the right to take part in public affairs, the right to vote, and the right to free elections. Article 25 of the International Covenant on Civil and Political Rights supports both participatory and representative models of democracy in so far as it protects the right to take part in the conduct of public affairs, directly or through freely chosen representatives.

¹⁰³ See Universal Declaration of Human Rights, arts. 21, 19, 20; International Covenant on Civil and Political Rights, arts. 19, 25; Aarhus Convention, arts. 6-8; Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean, art. 7.

¹⁰⁴ http://www.globalreporting.org.

¹⁰⁵ See IFC 2007, 91.

Notice of the decision being made or the project being considered needs to be given early in the process. By involving the public early in the process, they can bring to light possible prior instance of non-compliance, more effective approaches that will better ensure compliance, and otherwise help to reduce the likelihood of future violations. Engaging the public later in the process reduces the opportunity to change the project design. If the public is invited to participate only after the potential alternatives have been considered and narrowed, then the public is being notified, as opposed to engaged.

It is important that the proponents of the decision or project actively inform the public about its rights to participate and explain the avenues available to participate. Active outreach can take many forms. For example, when New Zealand undertook to construct a new section of State Highway 2, it utilized 14 different techniques to reach out to potentially affected citizens, including letters and phone calls to affected property owners, meetings with local citizens and citizen groups as well as indigenous Maori people, an informal open house, distribution of information kits, newsletters, press releases, and a display at the local library.¹⁰⁶

It may be necessary to build the capacity of civil society and local communities to participate meaningfully in the process. Local organizations may lack the technical expertise or resources to engage on highly complex projects involving key scientific or engineering questions. As a result, companies, government agencies, and nongovernmental organizations have built capacity of local people to participate. For example, the Waterkeeper Alliance builds capacity of local citizens to organize, monitor illegal pollution of rivers and lakes, and take action when violations are found.¹⁰⁷

Public participation must reflect the particular institutional, social, and political context of the project or decision. In this context, it is important to both be respectful of cultural norms and to be inclusive of vulnerable and traditionally underrepresented groups such as women, indigenous peoples, and youth. As discussed in Chapter 5, this is both a good practice (from a good governance perspective) and often a legal requirement, as indigenous communities have a right to free, prior, and informed consent.

It is important that public contributions are documented and accounted for in the final decision and that those outcomes are communicated back to the public. This helps to ensure that the process was deliberative and informed; it also provides a record in case the final decision is challenged. In this vein, some countries require agencies to compile formal "response to comments" documents where the agency provides a response to public comments in order to show the comment was heard and answered in a reasonable fashion. For example, Estonia's 2005 Environmental Impact Assessment and Environmental Management System Act requires developers to contact commenters individually with responses to questions and explanations on how their comments were incorporated into the planning process.¹⁰⁸ Unfortunately, this is one area in which many countries fail to meet best practices. According to the Environmental Democracy Index, only 19 of 70 countries examined, or 27 percent, rank good or very good in that their laws require agencies to consider public comments.¹⁰⁹ [It should be noted that the

¹⁰⁷ See https://waterkeeper.org/.

¹⁰⁸ Estonia Environmental Impact Assessment and Environmental Management System Act, sec. 17.

^{109 &}lt;u>http://www.environmentaldemocracyindex.org/</u> <u>map#2/11/1624/Law</u>.

¹⁰⁶ CO-SEED 2017b, 14.

Index focuses on the contents of the law; the Index includes only modest measures assessing actual practice.]

Finally, provision of training and resources to those charged with implementing public participation mechanisms is key to effective civic engagement. Often sectoral authorities are expected to abide by public participation requirements without adequate knowledge and skills to know what they are supposed to do and how to do it. For example, after India mandated training of officials in its public information laws, a World Bank study found that 60 percent of public information officers had not received any training.¹¹⁰

If government staff are not skilled in implementing public information requirements, there is a good chance that public participation procedures will fail to meet minimum legal requirements, much less reflect the elements of effective participation. This undermines the quality and legal adequacy of government efforts to include the public, and can result in nullification of government actions and wasted resources. For example, in 1993, the Constitutional Court of Slovenia nullified the long-term development plan for the region of Koper for failure to follow public participation procedures.¹¹¹ A 1992 amendment allowed construction of a quarry near the village of Premančan. National law required the municipal government of Koper to publicly display the text, a brief explanation of various components of the plan, and associated graphics at the seat of municipal assembly, in affected local communities, and at interested labor organizations.¹¹² Instead, the

municipality displayed the text of the plan without any graphics and only in the hall of the Koper municipal assembly, resulting in the plan's nullification.

This section reviews legal provisions and practices for public participation generally; in developing laws, regulations, and plans; in conducting environmental assessments and awarding permits and concessions; in community-based natural resource management; and in monitoring and enforcement.

3.3.1 National Constitutional and Legal Provisions on Public Participation

Increasingly, the right to public participation is guaranteed by national constitutions and laws. As with the right of access to information, these guarantees come in many forms: explicit and implied constitutional rights; national statutes governing public administration; rights provided in environmental and other sectoral legislation; and other forms, such as regional treaties and court interpretations of constitutions and statutes. As Figures 3.12-3.13 show, as of late 2017, 131 countries have constitutional provisions on public participation, 107 countries provide for public participation in their environmental laws, and 46 countries provide for public participation in laws governing public administration—for a total of 161 countries with legal provisions broadly guaranteeing and otherwise governing public participation in environmental matters.

Some constitutions provide a right to public participation as a procedural right to freedom of association and public participation in decision making.¹¹³ These guarantees may apply generally, or they may focus on public

¹¹⁰ World Bank 2012.

¹¹¹ Mirkovic and Klemenc 1995.

¹¹² Article 37 of the Law on Urban Planning and Other Spatial Interventions (Zakona o urejanju naselij in drugih posegov v proctor); Official Gazette SRS, no. 18/84, 37/85, and 39/86; and Official Gazette RS no. 26/90, 18/93, and 47/93.

¹¹³ Bruch 2002, 26.

participation in the environmental context. The Treaty on European Union, for example, guarantees that "[e]very citizen shall have the right to participate in the democratic life of the Union."114 Kenya's 2010 Constitution provides several procedural guarantees as well: public participation is a value and principle of governance;¹¹⁵ government must include citizens "in the process of policy making;"¹¹⁶ public participation must be included in national legislation to urban areas and cities governance and management;¹¹⁷ and citizens are to be included in the creation of legislation and the work of the national and county legislatures.¹¹⁸ When a right to public participation is not expressly granted by a country's constitution, often courts will conclude that the constitutional guarantee of freedom of association guarantees public participation.119

The efficacy of a constitutionally guaranteed right to free association can be undermined by national laws that limit its scope. This is especially true when the constitution allows the conditions of the right to be fixed by national law. If organizations fear that they will be punished for criticizing the authorities, they are less likely to take full advantage of their constitutionally endowed rights.¹²⁰

Several types of national laws address public participation in environmental matters, including environmental framework laws, laws governing various natural resources, and procedural laws. As with access to information and as shown in Figure 3.14,

- 117 Art. 174(c).
- 118 Arts. 118(1)(b) and 196(1)(b).

there is considerable variation in the rights and protections addressed by these laws, even within the same country.

Several countries have adopted framework environmental laws that include provisions for public participation. In Chile, the Ley sobre bases generales del medio ambiente (General Law on the Environment) requires the Ministry of Environment to encourage and facilitate public participation in the formulation of policies, plans, and environmental quality standards.¹²¹ Mexico's *Ley general del* equilibrio ecológico y la protección al ambiente (General Law of Ecological Balance and Environmental Protection) takes this one step further, requiring the federal government to promote public participation in not only the formulation of environmental and resource policies, but also their implementation, evaluation, and monitoring.¹²² Framework environmental laws may also establish specialized bodies for consulting the public on environmental matters.123

Laws governing natural resource extraction may include stipulations for public participation. In New Zealand, the Resource Management Act requires regional and district councils to develop their 10-year policies and plans in consultation with community stakeholders and interest groups, including the indigenous Maori people.¹²⁴ Sierra Leone has taken another approach to public participation, requiring holders of large-scale mining licenses to conclude benefit-sharing community development agreements with affected communities before commencing operations.¹²⁵ In South Africa, the Mineral

- 123 See Chapter 2.
- 124 UNEP 2006, 411.

¹¹⁴ European Union. 2007. Consolidated versions of the Treaty on European Union and the Treaty on the Functioning of the European Union. December 13. art. 10 (3). https://eur-lex.europa.eu/legal-content/ EN/TXT/?uri=celex%3A12012M%2FTXT.

¹¹⁵ Art. 10(2).

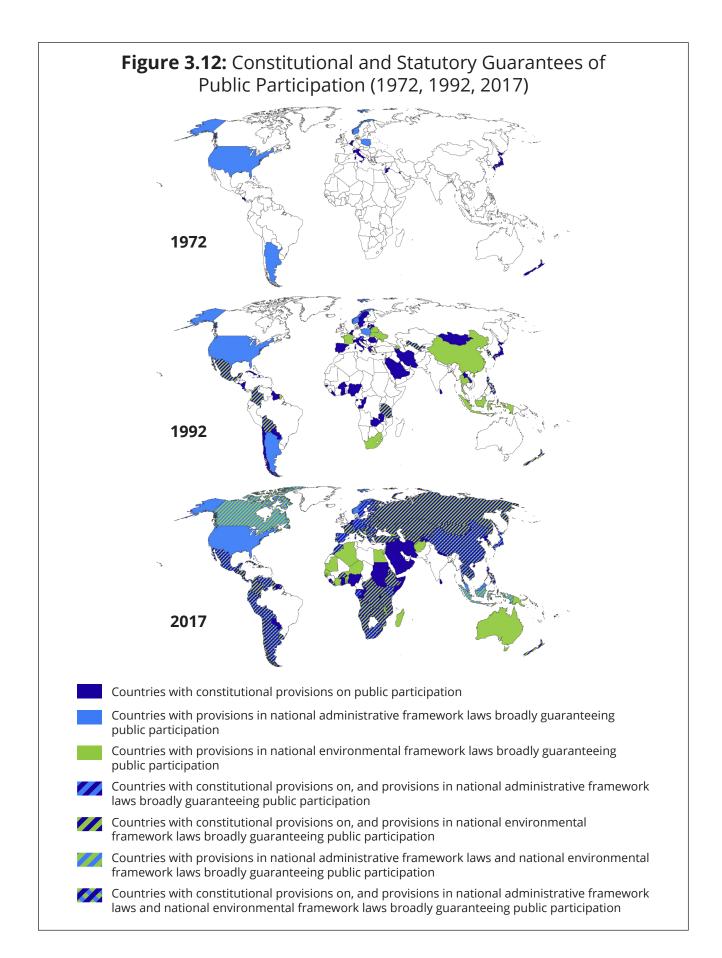
¹¹⁶ Art. 232(1).

¹¹⁹ Bruch, Coker, and Van Arsdale 2007. 120 Ibid.

¹²¹ Gobierno de Chile 2011, art. 70; Environmental Rights Database 2015.

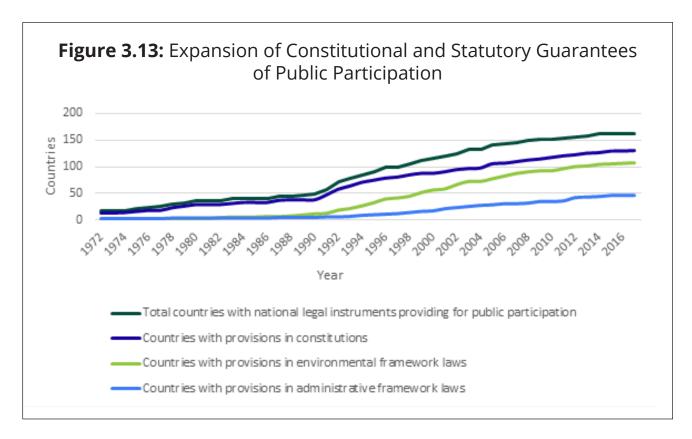
¹²² La Cámara de Diputados del Congreso de la Unión 1996, arts. 157-159; Environmental Rights Database 2015.

¹²⁵ Jensen and Cisneros 2015, 14; Natural Resource Governance Institute 2013.



Countries with constitutional provisions on public participation	Countries with provisions in national administrative framework laws broadly providing for public participation	Countries with provisions in national environmental framework laws broadly guaranteeing public participation
Albania, Andorra, Angola, Argentina, Armenia, Austria, Azerbaijan, Bahrain, Belarus, Belgium, Bhutan, Bolivia, Bulgaria, Burkina Faso, Burundi, Cabo Verde, Cambodia, Central African Republic, Chile, China, Colombia, Congo, Costa Rica, Croatia, Cuba, Cyprus, Czech Republic, Democratic People's Republic of Korea, Democratic Republic of the Congo, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Estonia, Eswatini, Ethiopia, Fiji, Finland, France, Gabon, Germany, Ghana, Greece, Guatemala, Guinea- Bissau, Guyana, Haiti, Honduras, Hungary, Iran, Iraq, Italy, Japan, Jordan, Kazakhstan, Kenya, Kuwait, Kyrgyzstan, Laos, Latvia, Lesotho, Liberia, Liechtenstein, Lithuania, Luxembourg, Maldives, Marshall Islands, Mexico, Micronesia, Monaco, Mongolia, Montenegro, Morocco, Mozambique, Namibia, Nepal, Netherlands, New Zealand, Nicaragua, Nigeria, Oman, Palau, Panama, Paraguay, Peru, Philippines, Poland, Portugal, Qatar, Republic of Korea, Republic of Moldova, Romania, Russia, Rwanda, Saint Lucia, San Marino, Sao Tome and Principe, Saudi Arabia, Serbia, Sierra Leone, Slovakia, Slovenia, Solomon Islands, Somalia, South Africa, South Sudan, Spain, Sri Lanka, Sudan, Suriname, Sweden, Switzerland, Syria, Tajikistan, Tanzania, Thailand, Timor-Leste, Tonga, Turkey, Turkmenistan, Uganda, Ukraine, Uruguay, Uzbekistan, Vanuatu, Venezuela, Viet Nam, Yemen, Zambia, Zimbabwe	Albania, Argentina, Armenia, Austria, Bolivia, Canada, China, Costa Rica, Croatia, Czech Republic, Dominican Republic, Ecuador, Estonia, Finland, Gabon, Germany, Greece, Indonesia, Japan, Kenya, Kyrgyzstan, Laos, Lithuania, Malaysia, Mexico, Micronesia, Montenegro, Morocco, Norway, Panama, Peru, Philippines, Poland, Romania, Serbia, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Thailand, The former Yugoslav Republic of Macedonia, United States, Venezuela, Viet Nam	Afghanistan, Albania, Algeria, Angola, Antigua and Barbuda, Argentina, Australia, Azerbaijan, Belarus, Benin, Bhutan, Bolivia, Bosnia and Herzegovina, Bulgaria, Burkina Faso, Cabo Verde, Cambodia, Canada, Central African Republic, Chile, China, Colombia, Comoros, Costa Rica, Côte d'Ivoire, Croatia, Cuba, Democratic Republic of the Congo, Djibouti , Dominican Republic, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Finland, France, Gambia, Georgia, Guatemala, Guinea- Bissau, Guyana, Haiti, Honduras, Hungary, Indonesia, Italy, Kazakhstan, Kenya, Kiribati, Kyrgyzstan, Laos, Latvia, Lesotho, Liberia, Lithuania, Luxembourg, Madagascar, Malawi, Malta, Mauritania, Mexico, Mongolia, Montenegro, Morocco, Mozambique, Namibia, New Zealand, Nicaragua, Niger, Papua New Guinea, Peru, Philippines, Poland, Portugal, Republic of Korea, Republic of Moldova, Romania, Russia, Rwanda, Samoa, Sao Tome and Principe, Senegal, Serbia, Slovenia, South Africa, Tanzania, Thailand, The former Yugoslav Republic of Macedonia, Timor-Leste, Togo, Tonga, Trinidad and Tobago, Turkey, Turkmenistan, Tuvalu, Uganda, Ukraine, Uruguay, Uzbekistan, Vanuatu, Venezuela, Viet Nam, Zambia, Zimbabwe

Source: Environmental Law Institute, based on data from FAOLEX, ECOLEX, The World Bank, Constitute, the European Soil Data Centre, and UN Environment.



and Petroleum Resources Development Act requires the government and the mine operator to facilitate public participation or consultations with the community.¹²⁶

In practice, according to the Environmental Democracy Index, laws on public participation lag behind those that ensure access to information: 79 percent of Index countries' laws have fair or poor public participation provisions.¹²⁷

3.3.2 Public Participation in Developing Laws, Regulations, and Planning

Public participation in the development of environmental laws and regulations gives legislators the benefits of the public's perspectives and oversight. Although legislators are the elected representatives of the people, direct review and comment upon draft legislation by civil society and the public helps bring the public's knowledge directly into the legislative process. This can be particularly important in highlighting issues regarding compliance, implementation, or enforceability that could either improve or decrease the effectiveness of the law. The process of engaging the regulated community in developing laws, regulations, and planning can increase compliance.128

¹²⁶ Republic of South Africa, Mineral and Petroleum Resources Development Act, No. 28 of 2002, secs. 10(1)(b), 16(4)(b), 22(4)(b), 27(5)(b), and 39.

¹²⁷ Environmental Democracy Index 2015a, 3.

¹²⁸ See, e.g., Freeman and Langbein 2000.

In some countries, the public can participate directly in the process of drafting and proposing laws. In Brazil, for example, draft laws can originate from a variety of sources, including civil society groups. A non-governmental organization drafted Federal Law No. 9985 of 18 July 2000, which established the National System of Nature Conservation Areas. Before legislators finalized the law, members of the public discussed and modified the

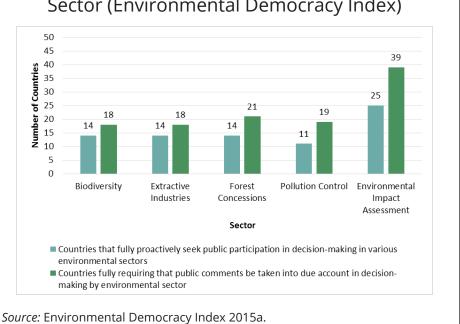


Figure 3.14: Public Participation Guarantees by Sector (Environmental Democracy Index)

law in a nation-wide series of workshops and public consultations.¹²⁹ Most countries, though, are still developing procedures for engaging the public in drafting laws. The Environmental Democracy Index found that among the 70 countries profiled, 0 percent ranked very good, 21 percent ranked good, 44 percent ranked fair (i.e., limited practice), and 31 percent ranked poor (i.e., no practice).¹³⁰

Many countries have adopted national administrative procedure or public participation laws that require all government regulations be subject to public notice-andcomment procedures. In Georgia, the public must have an opportunity to participate in the development of all regulations through a public administrative proceeding.¹³¹ Each proposed regulation must include a public review period of 20 working days followed by a public hearing for suggesting possible modifications. This is similar to the process described in the U.S. Administrative Procedure Act of 1946, which requires public notice of proposed rulemaking and the opportunity to submit written comments, data, views, or arguments, to which the relevant agency is required to consider and provide written responses.¹³² An analysis of nine pilot countries by The Access Initiative found that all nine adopted environmental impact association regulations that included public participation, but many are deficient and in half of the countries participation is limited to certain parties and occurs too late or too infrequently throughout the decisionmaking processes.¹³³ The analyses cited a similar study conducted of environmental impact assessment laws and regulations in 15 Latin American and Caribbean countries that revealed a similar trend, indicating that

¹²⁹ UNEP 2006, 403-404.

^{130 &}lt;u>http://www.environmentaldemocracyindex.org</u>.131 lbid.

^{132 5} U.S.C. sec. 553 (b)–(c).

¹³³ Henniger et al. 2002, 74.

proper compliance and enforcement of full public review and participation could be improved upon.

With the growth of the internet, a growing number of countries have introduced electronic systems to foster citizen participation in drafting laws and regulations. In 2001, Estonia launched the "I Decide Today" campaign, which enables Estonian ministries to upload draft bills and amendments so that citizens can review, comment, and make proposals on the legislation over a 14-day period. They can also respond to comments already submitted. At the close of the commenting period, all remarks go back to the Ministry for review. Revised legislation is made public, and registered users of the system may vote in support. While the system has not been as effective as hoped because not as many people are using it as expected, it nonetheless encourages regular citizen participation and monitoring of national laws.134

Public participation also plays an important role in planning. The form this participation takes may be a single consultation (such as a charette, in which stakeholders meet to discuss and revise plans or projects); the establishment of a dedicated working group that meets repeatedly over time; or the creation of ongoing tools for participation, such as online forums that allow comment and response. Such participation helps to ensure that developers and planners address community concerns and issues of compliance with specific laws; they can also build an informal social contract that can fosters compliance.¹³⁵ For example, Antigua and Barbuda developed a Sustainable Island Resource Management Zoning Plan through extensive stakeholder consultation, designating different categories of land and marine use with an associated set of

activity guidelines and regulations for each type of use.¹³⁶ A review of community-based natural resource management projects in the Philippines noted that in order to be more effective, the natural resource management "planning process should include local perceptions of the resources, identifying areas of intervention and risks, possible alliances and arrangements, and areas needing technical guidance."¹³⁷

The internet can allow citizens to engage much more actively in planning processes. Harava ("Rake" in Finnish) is an interactive map-based application for collecting feedback from citizens to gain a wider perspective in decision making. It was created in 2013 by Finland's Action Program on eServices and eDemocracy to encourage public participation in planning at the municipal level.¹³⁸ It functions as a question-and-answer platform for discussing ideas with local authorities, and its map-survey function allows citizens to mark their ideas on an online map, such as the location of proposed new green spaces. As of 2015, around 70 percent of Finland's major cities and 60 percent of Finnish nongovernmental organizations used Harava.139

Laws, regulations, and plans often change dramatically as they are being vetted by the public, so that the revised version is substantially different from what the public reviewed. It is important to keep the public informed of substantial changes to the proposal and to allow comment on those changes so that the final decision has been fully reviewed by the public. When agencies have dramatically revised draft proposals so that the final version includes elements not previously proposed for public review, even when the ideas were generated by the

¹³⁴ World Bank 2009.

¹³⁵ Odette 2005.

¹³⁶ Environmental Rights Database 2015.

¹³⁷ USAID 2012, xvii.

¹³⁸ http://www.eharava.fi/default.aspx.

¹³⁹ Ibid.

public, then courts have required additional public participation so that the public has had a chance to comment upon the proposal. For example, in the United States, a federal appellate court invalidated a final rule governing monitoring of air pollution sources because it was substantially different from the proposed rule and did not effectively provide prior notice and an opportunity to comment.¹⁴⁰ The court held that "an agency's proposed rule and its final rule may differ only insofar as the latter is a logical outgrowth of the former."

3.3.3 Public Participation in Assessment, Permitting, and Awarding Concessions

Public participation in the assessment of environmental impacts, permitting of facilities, and awarding of concessions is particularly important for ensuring that the decisions adhere to the substantive and procedural requirements set forth. These decisions about particular facilities, use of resources, and other activities often have the greatest impact on the health, livelihoods, and welfare of communities. At the same time, there are many reasons why the governmental review and decisions may not necessarily adhere to the legal requirements. There often are not enough staff to review the various assessments, permits, and concessions, and the staff are overworked. The government may prioritize investment, which can provide an incentive for staff to approve projects, even if there may be concerns. And with considerable revenues often at stake, there may be corruption associated with high-value concessions, projects, and facilities.

Experience has shown that actively engaging the public in these decisions provides

an effective means of addressing these challenges and increasing the likelihood that the legal requirements will be followed, increasing the environmental rule of law. Thus, recognizing these benefits of public engagement—as well as the reductions in project costs associated with protests when the public is not engaged—public participation is increasingly required during the development of projects with potentially significant environmental impacts, the provision of permits or licenses, and the awarding of concessions. As of 2017, 161 countries require public participation in environmental processes.¹⁴¹ In many cases, the requirements are still evolving: the Environmental Democracy Index reports that just 11 percent of countries rated as good or very good in requiring public participation in review processes.142

As discussed in Section 3.2.3 and highlighted in Figure 3.15, most States have adopted environmental impact assessment laws. These laws often require public participation and consultation during the assessment process in order to better incorporate the public's interests, knowledge, and values in the assessment.¹⁴³ In addition, most multilateral financial institutions, such as the World Bank, require projects they finance to provide an environmental and social impact assessment that includes stakeholder engagement.¹⁴⁴ Some private banks ascribe to the Equator Principles, which have a similar requirement.¹⁴⁵

¹⁴⁰ Environmental Integrity Project v. E.P.A., 35 Envtl. L. Rep. 20, 204, U.S.App.D.C. 2000.

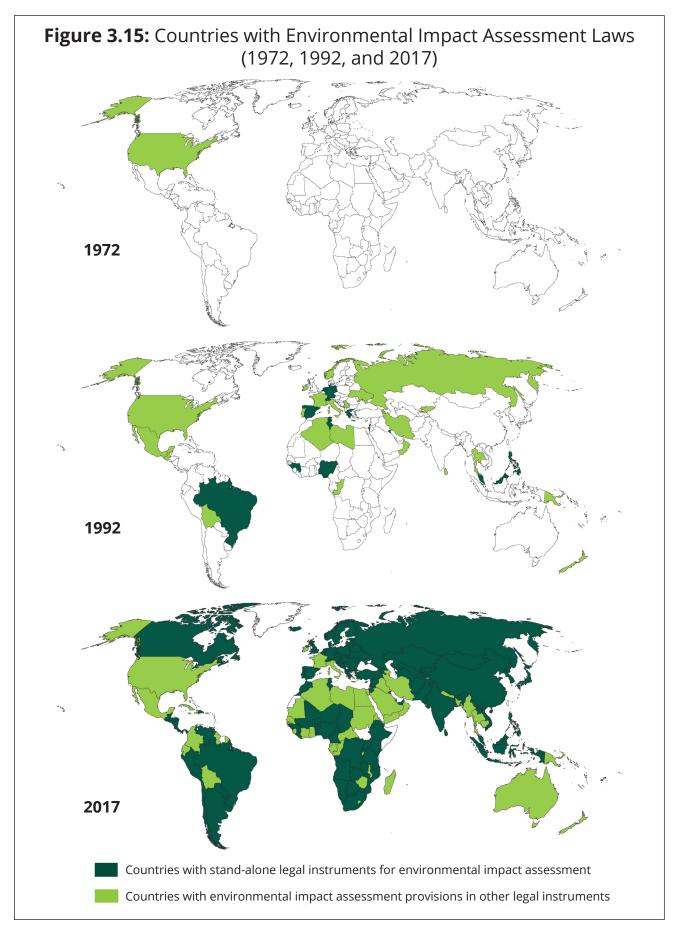
¹⁴¹ As illustrated in Figures 3.12-3.13, these requirements are found in national constitutions, framework environmental laws, administrative laws, and laws governing environmental impact assessments; accordingly, some requirements apply more broadly than to environmental issues.

¹⁴² Environmental Democracy Index 2015b.

¹⁴³ Environmental Rights Database 2015.

¹⁴⁴ World Bank Group 2007

¹⁴⁵ See <u>http://equator-principles.com/</u>.



3. Civic Engagement

Year	Countries with stand-alone legal instruments for environmental impact assessments	Countries with environmental impact assessment provisions in other legal instruments
1972		United States
1992	Philippines, Israel, Netherlands, Spain, Brazil, Malaysia, Switzerland, Guinea, Germany, Greece, Kuwait, Tunisia, Nigeria	United States, Algeria, Armenia, Congo, France, Guatemala, Iran, Ireland, Italy, Jamaica, Kyrgyzstan, Libya, Mauritius, Mexico, New Zealand, Norway, Oman, Palau, Papua New Guinea, Portugal, Russia, Saint Kitts and Nevis, Samoa, Serbia, Sri Lanka, Ukraine, Thailand, Bolivia
2017	Afghanistan, Albania, Angola, Argentina, Armenia, Austria, Bahrain, Belarus, Belgium, Belize, Benin, Bhutan, Bosnia and Herzegovina, Botswana, Brazil, Bulgaria, Burkina Faso, Cabo Verde, Cameroon, Canada, Chad, Chile, China, Costa Rica, Croatia, Cyprus, Czech Republic, Democratic People's Republic of Korea, Democratic Republic of the Congo, Denmark, Djibouti, Dominican Republic, El Salvador, Estonia, Eswatini, Ethiopia, Fiji, Finland, Georgia, Germany, Greece, Guatemala, Guinea, Guinea-Bissau, Honduras, Hungary, Iceland, India, Indonesia, Israel, Japan, Jordan, Kazakhstan, Kenya, Kuwait, Kyrgyzstan, Laos, Latvia, Lebanon, Liberia, Liechtenstein, Lithuania, Luxembourg, Malaysia, Mali, Malta, Marshall Islands, Micronesia, Mongolia, Montenegro, Morocco, Mozambique, Namibia, Netherlands, Nicaragua, Niger, Nigeria, Norway, Pakistan, Panama, Paraguay, Peru, Philippines, Poland, Portugal, Qatar, Republic of Korea, Republic of Moldova, Romania, Russia, Rwanda, Samoa, San Marino, Sao Tome and Principe, Serbia, Slovakia, Slovenia, South Africa, Spain, Sri Lanka, Sweden, Switzerland, Syria, Tajikistan, The former Yugoslav Republic of Macedonia, Timor-Leste, Togo, Tonga, Tunisia, Turkey, Turkmenistan, Tuvalu, Uganda, Ukraine, United Arab Emirates, United Kingdom, Tanzania, Uruguay, Uzbekistan, Vanuatu, Venezuela, Viet Nam, Zambia	Algeria, Andorra, Antigua and Barbuda, Australia, Azerbaijan, Bahamas, Bangladesh, Bolivia, Burundi, Brunei Darussalam, Cambodia, Central African Republic, Colombia, Comoros, Congo, Côte d'Ivoire, Cuba, Dominica, Ecuador, Egypt, Equatorial Guinea, Eritrea, France, Gabon, Gambia, Ghana, Grenada, Guyana, Haiti, Iran, Iraq, Ireland, Italy, Jamaica, Kiribati, Lesotho, Libya, Madagascar, Malawi, Maldives, Mauritania, Mauritius, Mexico, Myanmar, Nepal, New Zealand, Oman, Palau, Papua New Guinea, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Saudi Arabia, Senegal, Seychelles, Sierra Leone, Singapore, Solomon Islands, Sudan, Thailand, Trinidad and Tobago, United States, Yemen, Zimbabwe

Source: Environmental Law Institute. Researchers started with two databases (ECOLEX and FAOLEX) to find the earliest enacted legal instrument for environmental impact assessments in all UN-recognized countries. Where necessary or if possible, a secondary source was sought using search engines.

Notes: This map shows countries with a stand-alone, legally binding national instrument establishing or defining the use of environmental impact assessments in a country (in dark green) and countries with legally-binding provisions found in framework environmental laws or other laws. The map does not not account for regional agreements such as the European Union's 1985 decree, 85/337/EEC (unless a country has a legal instrument executing the requirements discussed in such an agreement).

Case Study 3.7: China's Enhanced Public Participation Requirements

China greatly enhanced its public participation requirements by adding Chapter 5, Environmental Information Disclosure and Public Participation, in its 2014 revisions to its Environmental Protection Law. Under article 56, "The project owner of a construction project for which an environmental information report should be prepared pursuant to the law shall explain relevant situations to the potentiallyaffected public when preparing the report, and solicit public opinions. The competent department responsible for examination and approval of the report shall [publish] the full text of the environmental information report upon receipt thereof with exception of State secrets or commercial secrets. In the case of a construction project failing to solicit public comments sufficiently, the competent department shall order the project owner to fulfill the task."^a

China published rules implementing these requirements, Measures for Public Participation in Environmental Protection.^b These rules require greater explanation of projects by the project owners and competent departments to the public. Further, they not only require that the agencies "take into full consideration" the opinions and suggestions of the public on environmental matters, but that they give feedback to the public and nongovernmental organizations "in an appropriate manner."^c It also provides that agencies may give financial support and guidance to civil society.^d

- b. See Bourdeau et al. 2015.
- c. Wang 2017, 155.

Cameroon's procedure for public consultation in the preparation of impact assessments is similar to that of other countries in outlining standard national legal requirements for public participation.¹⁴⁶ Cameroon's process obliges the Ministry of Environment and Nature Protection to carry out public consultations with nongovernmental organizations and local communities in the vicinity of proposed project sites. In order to provide the opportunity for a thorough review of the draft assessment, the public is notified several weeks before the consultations take place. Local representatives are sent a schedule of meetings, a description of the project, and an explanation of the goals of various project components. The consultation usually takes the form of several public hearings.¹⁴⁷ Issues emerging from the process, such as impact monitoring, are integrated into the project environmental management plan. China's new environmental protection law also contains a chapter devoted to public participation, as discussed in Case Study 3.7.

a. Wang 2017, 154.

d. Ibid.

¹⁴⁷ Décret N°2005/0577/PM du 23 février 2005 sur les modalités de réalisation des études d'impact environnemental, 2005, 3.

¹⁴⁶ UNEP 2006, 400.

The Bali Guidelines provide that States should "seek proactively public participation in a transparent and consultative manner, including efforts to ensure that members of the public concerned are given an adequate opportunity to express their views."148 As a result, public participation cannot be distilled into a simple checklist to meet each situation—to make public engagement meaningful in assessment processes depends on the context for each assessment. It may be necessary to create non-technical summary documents in a variety of languages that are made available through traditional means, such as public display in municipal centers and on websites, but also through active delivery to potentially impacted communities that might not otherwise be included in traditional government decision making.¹⁴⁹ For example, when Adastra Minerals undertook an assessment process in Katanga Province, Democratic Republic of the Congo, the target communities had low literacy, little understanding of the national language, and almost no use of paper (due to scarcity). They relied upon local radio stations, posters using mostly graphics, communications in Swahili in addition to French, and mobile phones and text messaging to contact people and engage local communities.¹⁵⁰

Impact assessment documents are often prepared by project proponents on behalf of the state agency. This can result in a subtle or even obvious bias toward the project, for which state agencies must be alert.¹⁵¹ For example, when the company constructing the Dakota Access Pipeline created an environmental assessment for the U.S. Army Corps of Engineers, it determined that the project would not impact disadvantaged communities because none were located near the project. But a reviewing court struck down this conclusion, noting the assessment had arbitrarily decided to examine only communities within one-half mile of a pipeline borehole, which excluded the entire Standing Rock Sioux reservation, which was located more than one-half mile but less than one mile from the pipeline.¹⁵²

Public participation is equally critical in decision making related to permits and licenses. These can take the form of facility permitting, media-specific discharge permitting, integrated permitting, sectoral permitting, and environmental auditing.¹⁵³ Global standards for the type of information that should be included in permits for industrial emissions and available through public participation procedures are under development.¹⁵⁴ Some countries subject the licensing of ongoing activities, such as industrial facilities and their discharges, to the same public participation requirements that apply to environmental and social impact assessments. For example, in Bulgaria public participation is a compulsory and essential part of the permitting process for industrial construction, operation, and renovation, and for integrated permits for storing dangerous substances.¹⁵⁵ Other countries have concluded that the award of permits triggers the environmental and social risk assessment laws and their public participation requirements.¹⁵⁶

156 Foti et al. 2008, App. 4.

¹⁴⁸ UNEP 2015, Guideline 9.

¹⁴⁹ UNEP 2015, 84-85.

¹⁵⁰ IFC 2007, 37.

¹⁵¹ *See, e.g.,* Bruch et al. 2007 (when comparing actual impacts with predicted impacts in environmental impact assessments for five projects with effects on transboundary watercourses, observing an "optimism bias" that the environmental and social impacts were always predicted to be less than they actually were).

¹⁵² Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers, June 14, 2017 (D.D.C. 16-cv-01534).

¹⁵³ See UNEP 2015, 70.

¹⁵⁴ UNEP 2015, 83; EU Industrial Emissions Directive, 2010/75/EU, <u>http://ec.europa.eu/environment/</u> industry/stationary/ied/legislation.htm.

¹⁵⁵ UNEP 2006, 412.

Case Study 3.8: Increasing Income and Forest Cover through Community Involvement

Forest cover in the Nueva Vizcaya region of the Philippines declined from 85 percent to 25 percent from the early 1980s to the early 2000s due to legal and illegal logging.^a The Philippines government undertook the Trees for Legacy Program, which included several measures to involve the community in reforestation and watershed protection. It used the country's Local Government Code of 1991 to co-manage local forests with local government units. The program increased land and forest tenure for local citizens and offered financial incentives for communities to participate actively in forest planting and preservation. Public participation in local government planning and government increased as civil society was given more opportunities for input. Poverty incidence in the province dropped from 52 percent to 3.8 percent by the time the project ended in 2004. In addition, programs were put in place to help increase financial management at the local level, improve health care, and take care of disadvantaged populations, such as the deaf and blind. Forest fires were virtually eliminated, and there was a marked improvement in water supply for domestic use and irrigation.^b The local congressman wrote that the project's success lay in pairing the technical expertise of the Department of Environment and Natural Resources with the oversight and implementation skills of the local community.^c

- b. USAID 2012, 29-30.
- c. Agbayani 2005.

Public consultation on permitting decisions helps to ensure that the rights of neighboring communities are reflected. This may even lead to the amendment or even rejection of a permit application. As discussed in Section 4.3.2, when a mining company sought to clear a forest area in order to mine for bauxite in the Niyamgiri hills, the Indian Ministry of Environment and Forests consulted with the Dongria and Kutia tribes that inhabit the surrounding area. After the discussions, the village and community representatives from twelve villages surrounding the site rejected the proposed mine based on concerns it would violate their religious and cultural rights. Subsequently, the Ministry rejected Vedanta's application.¹⁵⁷

Concessions are often awarded in a multi-step process, and public consultation is vital to each step. Many countries conduct resource planning to help determine what resources to exploit, when, and how. Public participation provides key input to these planning exercises and helps to ensure that the required procedures and standards are adhered to, as discussed in Section 3.3.2. When ministries come to award specific concessions to particular concessionaires, another round of

a. <u>https://www.innovations.harvard.edu/tree-legacy-tree-resources-education-enterprise-and-legacy</u>.

¹⁵⁷ Environmental Rights Database 2015. *See also* the discussion on free, prior, and informed consent in Section 4.3.2 infra.

consultation, often through environmental and social impact assessment, is conducted.

3.3.4 Community-Based Natural Resource Management

Perhaps the fullest form of involving the public in environmental decision making is community-based natural resource management, where the community is empowered to manage natural resources directly and to benefit from the resources. Prior to contemporary forms of government, communities often managed their resources directly without the intervention of a central state authority. Community management of resources has demonstrated many benefits, including increased compliance with locally established norms and institutions, sustainable management of resources, benefits flowing directly to communities, and promotion of good governance in local institutions.¹⁵⁸

Experience over the past 40 years demonstrates that national agencies often struggle to effectively manage natural resources that are often in remote areas and about which national authorities may lack local knowledge. By empowering local communities to either assist in or be primarily responsible for natural resource management, a certain amount of power is reallocated to local communities that have a stake in sustainable resource management and that often have a long tradition of customary laws and institutions sustainably governing resource use. Experience implementing community-based natural resource management in developing countries suggests that local communities can sustainably manage natural resources while using democratic institutions that often help empower women.¹⁵⁹ Case Study 3.8 highlights

the success of community management of forests in the Philippines.

Devolving management authority over resources to communities is not a panacea. Lessons from areas where communities have been empowered to manage resources suggest that many communities need assistance to help establish or reestablish governance mechanisms that are inclusive and effective at resource management.¹⁶⁰ Just as there is no "one-size-fits-all" approach to public participation, communities have to learn how best to manage their resources within the local culture and context in conjunction with subnational and national authorities. Customary laws and institutions have to be monitored to ensure they do not contravene statutory laws, and the rights of traditionally disadvantaged populations have to be monitored by government to ensure they are fairly treated by customary institutions.¹⁶¹

A review of community-based natural resource management projects in Southern Africa found that they helped democracy take root in local institutions and enabled women to take leadership positions in community institutions.¹⁶² But it also found challenges, including a failure at times to widely consult community members, capture of benefits by chiefs, and financial mismanagement. Capacity building for local communities and reasonable oversight by national agencies were found to be effective responses.¹⁶³

Citizens are key government allies in monitoring and enforcing environmental and natural resource laws. Providing citizens with the tools and legal protection to act as the eyes and ears of environmental monitoring

¹⁵⁸ See generally USAID 2013.

¹⁵⁹ Ibid.

¹⁶⁰ Blaikie 2006; Kellert et al. 2000; Pomeroy 1995.

¹⁶¹ USAID 2013, 21-22; see also Section 5.1.4 infra.

¹⁶² Ibid., 22.

¹⁶³ Ibid.; see also Kawamoto 2012 (corruption in the community management of diamond revenues addressed through intervention by the Government of Sierra Leone and awareness raising).

and enforcement agencies can greatly increase detection and compliance with laws. Increasingly, governments have turned to local citizens to act as de facto government agents.

Citizen participation in monitoring and enforcement rarely hands direct enforcement authority for environmental laws to the citizens—this would contravene rule of law by negating the checks and balances of the legal system. Instead, citizens are often called upon to report any behavior that appears illegal or to report actual wrongdoing to the authorities so that the authorities can act, as described in Case Study 3.9.

Citizens may organize groups that periodically investigate facilities, concessions, and other permitted entities to ensure compliance with the law. For example, Waterkeeper organizations in 44 countries on six continents monitor local water bodies to determine whether anyone is illegally discharging.¹⁶⁴ They may sample effluent being discharged to ensure compliance with published standards. And they monitor ambient water quality to ensure compliance. Where they find violations, they document them and share their findings with the government. They may also bring citizen suits to enforce, if the government declines to file suit. There are over 300 Waterkeeper organizations around the world. It is important to note that these organizations conduct their efforts in public spaces—and do not trespass in their investigations.

Because of the tremendous power imbalances between citizens and those who break environmental laws, it is critical that citizens be given legal protection through whistleblower laws, which are discussed at length in Section 4.4.2. These protections can include provision of confidential telephone hotlines and internet tools to enable the public to report environmental problems.¹⁶⁵ Legal protections prohibiting retribution against whistleblowers is crucial. For example, the 2014 revision of China's Environmental Protection Law includes protections for whistleblowers who report environmental violations. Because whistleblowers often suffer retaliation, the law instructs environmental protection departments to keep the identity of whistleblowers confidential in order to protect their "legitimate" rights.¹⁶⁶

Agencies often engage the public in monitoring and enforcement through collaboration between private citizens, civil society, and government agencies so that agencies can couple their expertise with the local knowledge and presence of citizens and nongovernmental organizations. In Cameroon, for example, the Last Great Ape Organization has collaborated with the government since 2006 to enforce the country's wildlife laws. Although it does not participate directly in the enforcement of wildlife or other environmental laws, representatives of the organization regularly participate in investigations, field operations, legal affairs, and post-conviction visits with convicted individuals.¹⁶⁷ Through civil society's contributions, the government has improved compliance and enforcement, achieving an 87 percent success rate in prosecuting violators of wildlife laws and accruing damage awards up to US\$200,000.168 Extensive media coverage of the collaboration (some 365 media pieces in TV, radio, and print per year) has also led to greater public awareness of wildlife laws.¹⁶⁹

¹⁶⁴ Cronin and Kennedy 1999; Luchette and Crawford 2008.

¹⁶⁵ These are sometimes mandated by law. Under the Surface Mining Control and Reclamation Act, for example, citizens are allowed to report violations relating to coal mines and to accompany the inspector on an inspection that results from the citizen's complaint (30 U.S.C. sec. 1271(a)(1)).

¹⁶⁶ Yang 2014.

¹⁶⁷ UNEP 2006, 488-489.

¹⁶⁸ See Clynes 2010.

¹⁶⁹ Last Great Ape Organization Cameroon 2016.

Case Study 3.9: Integrating Information, Participation, and Reporting

"Publish What You Pay Indonesia" is an innovative example of the integration of access to information with public participation in environmental monitoring and enforcement. This Android-based internet application enables the public to check the location of oil, gas, and mining concessions, the revenue they generate, and the social conditions in the surrounding area. It also ties to the government-run citizen complaint and information submissmaion system, LAPOR.^a The application maps the concession locations so that the public can detect if a concession is operating outside of its boundaries, information that is often difficult to determine for an average citizen who would not know the legal boundaries of a concession. Provision of information about the revenue generated and the socio-economic status of the region allows the public to understand the concession's economic contribution to the region.

Integration of the LAPOR system allows citizens to contact government directly. This innovative system was established in 2011 to allow citizens to provide feedback to the government on key initiatives. It was so popular that it was expanded to all areas. A mandate was put in place that any complaint be responded to by the responsible agency within five working days. Citizens can send complaints by texting, on its website, through its mobile app, or on Twitter.^b The LAPOR system also lets government officials communicate with one another and verify that agencies are being responsive to citizens' needs. The system currently fields over 500 complaints per day.^c

c. Ibid.

In 2015, China announced it would pay rewards of up to 50,000 yuan to residents who reported serious environmental violations, including the dumping of hazardous waste or radioactive materials, and 3,000 yuan to residents who report firms that are improperly using or tampering with environmental monitoring equipment.¹⁷⁰

In some countries, the government deputizes volunteers to enforce environmental laws. In Fiji, the Fisheries Act enables the minister responsible for fisheries to appoint honorary fish wardens. The wardens are tasked with the prevention and detection of violations of the Act. These volunteers play an important role in policing customary fishing grounds, and they are usually a member of the tribe or clan that owns the fishing grounds.¹⁷¹ In the Philippines, the Implementing Rules and Regulations of the Wildlife Act provides for measures to deputize members of the public as Wildlife Enforcement Officers. The Act

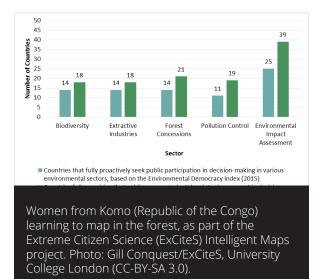
a. <u>https://www.opengovpartnership.org/stories/open-mining-extractive-data-disclosure-citizen-empowerment</u>.

b. https://govinsider.asia/innovation/inside-lapor-indonesias-complaints-unit/.

¹⁷¹ UNEP 2006, 408-410.

3. Civic Engagement

foresees the deputation of private volunteers and citizen groups to assist in all aspects of the Act's enforcement, including the seizure of illegal wildlife, arrest (even without a warrant), and surveillance.¹⁷²



Citizens also serve as critical monitors of environmental quality in many countries using so-called citizen science. Equipped with basic training, citizens can monitor water guality, air guality, species diversity and prevalence, and many other environmental indicators.¹⁷³ They can greatly extend the reach of government resources with little investment on the government's part to collect significantly more data than trained government technicians. While this information can be very helpful, citizen-generated data may not always substitute for data collected using official government methods and official chains of custody, which may be required by courts under their rules of evidence. In such circumstances, countries may wish to consider legal amendments that recognize the use of citizen science in investigations and prosecution, even if it may still be challenged in court.

There are several innovative and impactful uses of citizen science.¹⁷⁴ The sea turtle monitoring network Grupo Tortuguero investigates turtle diet, distribution, and disease at sites throughout northwestern Mexico. Thanks to the partnership between biologists, agencies, and communities, new marine protected areas have been established and sustainable fisheries practices that protect both turtles and livelihoods have been implemented. In the United States, the West Oakland **Environmental Indicators Project allows** individuals living in a poor neighborhood to collect air-quality and health data documenting the impact of air pollution on local citizens. And as illustrated in the photo to the left, scientists from University College London are working in the Republic of the Congo where smartphones allow individuals to record environmental impacts, such as poaching and illegal logging.¹⁷⁵

While engaging the public to address a specific task is helpful, public engagement is often most helpful when it creates a relationship that will endure over time and build trust and understanding between citizens, the government, and companies. For example, the International Finance Corporation has reported experiences in Peru where mining companies engaged with communities through participatory science and scoping a site even before exploration, and this engagement helped forge a relationship between community members and the companies that facilitated future dealings.¹⁷⁶ These efforts demonstrate the benefits of investing in effective and locally relevant public participation to improving environmental and social compliance and outcomes.

174 *See* Bonney et al. 2014. 175 Ibid. 176 IFC 2007, 74, 115.

¹⁷² Ibid.

¹⁷³ See generally Blaney et al. 2016.

3.4 Opportunities and Recommendations

Civic engagement is a cornerstone of environmental rule of law that leverages the resources of civil society and the public to better inform government decision making, assist in monitoring and enforcement of environmental laws, and hold accountable the regulated community and government agencies. Public participation in environmental decision making makes it more likely public concerns are surfaced early and can be addressed before private or government resources have been committed to a certain outcome. And engagement of the public in a meaningful dialogue with government and project proponents can help create trust and social cohesion that extends far beyond environmental issues.

Many States have taken steps to require access to information and public participation in environmental decision making. In many cases, the next step is to **provide more detailed requirements and procedures as well as training to implementing agencies** so that these requirements can have their full effect. Sufficient experience has been gained after decades of implementation that best practices and key methodologies can be broadly shared across government.

The relatively simple act of making environmental information accessible to the public can have a profound impact on compliance and enforcement. Publishing concession contracts online lets citizens know the boundaries and environmental requirements expected of concessionaires. Reporting environmental monitoring information and publishing periodic stateof-the-environment reports empowers citizens to decide what are the foremost environmental threats and how effectively the government is addressing them. Many countries are using websites to their great advantage in engaging the public. *Websites can make information more readily available, collect citizen monitoring data and complaints, connect citizens with government officials, and allow officials to respond to citizen inquiries with speed and efficiency*. Although web interfaces are not a replacement for face-to-face relationship building with citizenry, they can simultaneously engage more people and lessen the burden on government of providing meaningful public participation.

With the broad acceptance of the importance of access rights, governments can focus on **fostering a culture of civic engagement** in which officials understand the value of engaging civil society. Actively informing the public of government data and vetting government decisions with citizens can become part of the mission of frontline agencies as much as their sectorial responsibilities. As the value of public review and input becomes more clear, bureaucratic resistance should drop, provided that resources are provided to allow agencies to foster this culture.

Agencies would not expect an auditor to be able to answer legal questions nor that a lawyer could audit a financial statement. In the same fashion, agencies need dedicated, professional staff to engage civil society and to serve as a resource for government staff on civic engagement. The diversity of legal requirements in this area coupled with the many techniques available to meaningfully engage the public make such positions essential to supporting agency staff who are required to engage or inform the public. In addition, given the highly political nature of many environmental decisions, a small investment in active and skilled professional civic engagement can result in significant payoffs through avoided conflicts and increased social cohesion.

3. Civic Engagement

One clear opportunity for improving environmental rule of law through civic engagement is **expanding the use of citizen science**. Citizens can be the eyes and ears of government with a minimal amount of training and resources. Citizen science allows anyone with a cell phone and internet connection to become a pollution monitor, species tracker, and violation reporter. While citizens are not a replacement for trained government officials, they can greatly extend the reach and impact of environmental laws and agencies.

Civic engagement at times requires building the capacity of the public to engage thoughtfully and meaningfully

with government and project proponents. Educating the public about their rights to access information and participate is a necessary first step, and providing tailored assistance when a community is unable to engage should be considered part of government's responsibility. This can build a more robust citizenry that can support stronger government and rule of law.

Civic engagement is easy to support as a slogan and idea, but requires attention, resources, and commitment to implement to its full potential. As countries work to implement laws that require access to information and public participation, many new techniques and best practices are coming to the fore. It is also becoming more apparent that civic engagement, even when it means addressing disagreements and controversies, when handled skillfully helps build relationships among communities, government, and business and strengthens the broader social fabric.



4. Rights

4.1 Introduction

Legal rights and duties are the heart of environmental rule of law. They provide agencies the authority to act, people the ability to seek justice, and companies the obligations to act sustainably. The legal rights and duties that animate environmental law are found in international treaties, national and subnational constitutions and laws, customary practices, and judicial decisions. They are rooted not only in environmental law, but also human rights, international, administrative, and other fields of law. Rights and duties are inextricably linked.

Much of the emphasis of environmental laws, institutions, and practice to date has focused on operationalizing duties. Laws define the duties of polluters to obtain and comply with permits that establish limits for pollution of the air, water, and soil. They also set forth responsibilities of government authorities to regulate, monitor, enforce, and otherwise govern activities that could harm the environment and public health. When implemented, environmental laws have often proven successful at controlling pollution and sustainably managing natural resources. As noted in Chapter 1, though, too often environmental laws are not effectively implemented or enforced. It is in these circumstances that rights and rights-based approaches become particularly important as a complement to duties.

After decades of rapid development of environment-related rights, government, companies, courts, and citizens in many places are still grappling with transforming these words on paper into meaningful and lasting environmental protections. This chapter focuses on the evolving and deeply interdependent interrelationship between environmental rule of law and various environmental and human rights.

Many rights are important to environmental rule of law. Human rights to transparent, participatory, and responsive governance are essential to achieving effective environmental rule of law by giving a voice to the disadvantaged, requiring effective government, and providing access to justice. National constitutions often establish a constitutional right to a healthy environment as a fundamental right. And a growing number of countries recognize the rights of nature independent of human rights, providing rights for rivers and other environmental elements. *Increasingly, countries recognize that environmental rule of law relies both on traditional environmental laws and on protection of environment-related rights using a rights-based approach*, which is a focus of this chapter.

Environmental rule of law is important to the realization of numerous rights. The failure to effectively implement and enforce environmental law often leads to environmental degradation that impairs constitutional and human rights by infringing on the enjoyment of health, access to water, and in serious instances—as Supreme Courts in many countries have recognized—the right to life.¹

This chapter reviews this evolving relationship between environmental rule of law and environment-related rights. It traces the sources of relevant rights and examines the many constitutional and human rights—such as the right to life, the right to the enjoyment of the highest attainable standard of health, the right to an adequate standard of living including adequate food, and the right to safe drinking water and sanitation—that are closely linked to the environment, as well as the various procedural rights that are essential elements of environmental rule of law. This chapter pays particular attention to constitutional and human rights, which enjoy elevated status in most legal systems. The chapter then reviews the role that a constitutional right to a healthy environment plays in many countries, and how enforcing

the rights to nondiscrimination, free association, and free expression are necessary for environmental rule of law. Finally, this chapter reviews environmental defenders' critical role in protecting the environment and the grave importance of using rights-based approaches and human rights law to protect these defenders. In sum, **just as fundamental rights cannot be enjoyed without a healthy environment, sound environmental rule of law cannot exist without the establishment of and respect for rights.**

4.1.1 Core Concepts

This section discusses core concepts at the intersection of rights and environmental rule of law. It (1) reviews the origins of environment-related rights and duties; (2) articulates a rights-based approach to environmental protection; (3) explores the dynamic relationship between rights and environmental rule of law; and (4) traces the expansion of rights-based approaches across the globe.

4.1.1.1 Origins of Environmental Rights and Duties

A right is a moral or legal entitlement that can be positive, meaning a person is due something (such as the right to water), or negative, meaning a person is entitled to be free from interference (such as a right to privacy). With rights come duties,² such as the legal duty of government to provide water and the legal duty of citizens not to invade another person's privacy.

Societies have created legal duties and rights relating to the environment and natural resources for millennia. The Act of Fa Chong Ling, promulgated before 771 BCE in China,

² Hohfeld 1913.

prohibited the taking of trees and wildlife without permission,³ and the English Magna Carta, signed in 1215, guaranteed citizens access to rivers and forests and gave rise to the English Forest Code shortly thereafter.⁴

The modern era of environmental law began in the late 1960s, when population growth, industrial expansion, and innovations in chemistry resulted in dramatic impacts to ecosystems, wildlife, and public health. Many industrialized nations adopted environmental national laws in the 1970s and 1980s, and the global community of nations adopted a growing number of multinational environmental agreements.⁵ Many of these initial approaches focused on promulgating media-specific environmental laws that required the government to regulate specific industries, sectors, or environmental media and saw measurable impacts. For example, in the United States, implementation of the Clean Air Act saw reductions of approximately 70 percent of six key air pollutants.⁶ Many of these laws relied on individuals to supplement enforcement, by empowering them to protect their rights (to health, to livelihoods, and to enjoyment of the environment) by bringing citizen suits for violations of the law. By the 1990s, many nations adopted constitutional provisions protecting the environment, which ushered in what is known as a rights-based approach to environmental protection, which is discussed below.7

4.1.1.2 Rights-Based Approaches to Environmental Protection

A rights-based approach to environmental protection is one that is normatively based

on rights and directed toward protecting *those rights.* This approach differs from regulatory approaches where environmental statutes set forth certain requirements and prohibitions relating to the environment. A rights-based approach complements regulatory approaches—and together they can more effectively enhance environmental rule of law and environmental outcomes. In addition to national constitutions and human rights treaties, environmental statutes and international agreements other than those designated specifically as human rights instruments can often establish enforceable rights that protect human health and the environment.8 As discussed below, there is often an emphasis on constitutional and human rights because, in the hierarchy of laws,⁹ they enjoy primacy in most legal systems and inclusion of environmental provisions in constitutions and human rights instruments has the legal and political effect of placing the highest importance on protecting human health and the environment.

For example, if a mine is leaking acidic water into a community water supply in a country with a constitutional right to a healthy environment or a right to water, citizens could seek redress in court for a violation of these rights. If the country only had a mining statute that empowered an environmental agency to address acid mine drainage, then the citizens would likely have to rely on the agency to act and might have limited options in court. But if a country had both regulatory and rights provisions, then if the agency failed to act under the mining statute, the citizens would still have redress under the constitutional right. This occurred in Marangopoulos Foundation for Human Rights v. Greece, where the European Committee of Social Rights interpreted the European Social Charter's right to health to include environmental

³ Dong 2017, 22-23.

⁴ Magraw and Thomure 2017, 10934-10940; Robinson 2015, 311.

⁵ Sands and Peel 2012, 22; Lazarus 2004.

⁶ USEPA 2018.

⁷ Bruch et al. 2007.

⁸ Boyle 2007; Timbers and Wirth 1985.

⁹ *See, e.g.*, Kelsen 2005; Hart 2012.



concerns.¹⁰ The ruling ensured that a lignite mining operation ceased harming public health through its emissions of particulate matter and gases.

Rights that can be used to support the environment and human health can come from many areas of law, including environmental law and human rights, and can come in many forms, including treaties, constitutional provisions, and statutes. Most prominently, 150 national constitutions include environmental provisions,¹¹ as discussed in Section 4.2. These provisions are often called "environmental rights," meaning "any proclamation of a human right to environmental conditions of a specified quality" that falls within a range of classifications: "safe, healthy, ecologically sound, adequate for development, sound, etc."¹² More than half of these provisions are framed as rights of the citizens, while remaining provisions are framed as duties of the state.¹³ Many more national and subnational laws both provide statutory rights and protections related to the environment, even absent any constitutional environmental right.

Although environment-related rights and duties are now widespread,¹⁴ an implementation gap remains between the requirements and obligations they create at multiple levels of government and the environmental results around the world. To address this implementation gap, many governments and citizens are using rights-based approaches to help meet environmental commitments and reinforce the importance of environmental law. When governments recognize rights, they take on accompanying duties to ensure protection of those rights.¹⁵ Such duties include ensuring that third parties, including businesses, do not violate these rights. To fulfil their duties, governments adopt policies, legislation, and regulations that mandate institutions to prevent, investigate, punish, and redress such abuse. Case Study 4.1 illustrates how communities and advocates can use rights to protect environmental values, especially when a government fails to act.¹⁶

Appealing to human rights is especially powerful because they are the most fundamental rights. They came into particular focus after World War II with the 1948 Universal Declaration of Human Rights.¹⁷

¹⁰ Marangopoulos Foundation for Human Rights v. Greece 2006.

For an earlier tally identifying 130 national constitutions, see UN Office of the High Commissioner for Human Rights and UNEP 2012, 19.

¹² Ibid.

¹³ Ibid.

¹⁴ As discussed in Box 1.3, the specific environmentrelated rights that apply in a particular circumstance depend on the national and international law that applies to that country and context.

¹⁵ UNGA 2018a, 3 ("Duties may be viewed as the inverse side of rights. If citizens have rights, states and other actors have duties to respect and protect the rights.").

¹⁶ Knox 2012.

¹⁷ UNGA 1948.

Case Study 4.1: Nepal Supreme Court Orders Environmental Action Based on Constitutional Rights

In *Suray Prasad Sharma Dhungel v. Godavari Marble Industries and Others*,^a citizens and nongovernmental organizations sought a writ of mandamus in Nepal's Supreme Court against a marble factory on the basis that it caused environmental degradation to the Godavari forest and its surroundings. The factory emitted dust, minerals, smoke, and sands and had polluted the water, land, and air of the area, which endangered the life and property of the local people. The Court held that Nepal's constitutional provision protecting the right to life necessarily included the right to a clean and healthy environment in which to live that life. Because environmental protection is an issue of public interest and all citizens have an interest in public issues, individuals interested in protecting the environment, including nongovernmental organizations, have standing before the Court. The Court ultimately denied the writ of mandamus because petitioners had not been put in place, the Court issued directives to the Parliament to pass legislation to protect the Godavari environment and the air, water, sound, and the environment generally, and to enforce the Minerals Act.^b

a. Dhungel v. Godawari Marble Indus, WP 35/1992. Supreme Court of Nepal, Oct. 31, 1995.

b. For more details about the Court's judgment and the impact of this case on Nepali environmental jurisprudence, see Sijapati 2013.

Subsequently, human rights have been enshrined in numerous international and regional treaties¹⁸ and are enforced and otherwise vindicated by international and regional tribunals and commissions, such as the International Criminal Court, the Inter-American Court of Human Rights, and the European Court of Human Rights, as well as by domestic courts and tribunals. *Human rights have a longer history and more diverse set of treaties and institutions in place to enforce them than do environmental statutes.*

Human rights are rights inherent to all human beings regardless of nationality, sex, ethnicity, or other characteristics. These rights are wideranging and fundamental to human dignity. Figure 4.1 shows rights that relate to the environment.

Some countries are also providing rights to nature and environmental elements themselves. Not all environmental considerations are or should be framed in context of their relationship to humans. *The* ecosystem and other beings have values and importance beyond their use or benefit to *humans.* Conservation of natural resources and other species can be framed as a moral imperative in recognizing that other beings and nature itself have intrinsic rights. In fact, some nations recognize intrinsic rights of nature. Ecuador's 2008 Constitution refers by name to the deified representation of nature—Pacha Mama—in the Andean traditions from which many aspects of the

¹⁸ See Annex II.

4. Rights

Figure 4.1: Substantive Rights Relating to the Environment

Non-discrimination Health Life Women's rights Children's rights Sovereignty over natural resources Water Sanitation Enjoyment of the benefits of scientific progress and its applications Self-determination Indigenous rights Housing

nation's culture are derived.¹⁹ Pacha Mama's "right to integral respect for its existence and for the maintenance and regeneration of its life cycles, structure, functions and evolutionary processes" imposes obligations on communities and public authorities alike to protect those rights.²⁰ Under this provision, an Ecuadorian court ruled in 2011 that a river's right to flow had been violated by road development and ordered the river restored to health.²¹ Respect for the intrinsic right of nature to exist is common to many indigenous worldviews.²² In 2010, Bolivia's Ley de Derechos de la Madre Tierra (Law of the Rights of Mother Earth) gave Mother Earth legal rights and legal personhood that can be represented by humans in court; this law was based on a broader approach to environmental issues enshrined in the 2009 constitution.23

Just as Bolivia has done, other nations have granted natural resources legal personhood, giving them all the rights of a person, such as the right to be heard in court. This is similar to extending rights to corporations and organizations, as has been done in some countries.²⁴ In New Zealand, Te Urewera, a former national park, has been declared "a legal entity, and has all the rights, powers, duties, and liabilities of a legal person" exercisable by a board appointed on its behalf,²⁵ and the Whanganui River was given similar status.²⁶ A court in India has accorded the Ganges and Yamuna Rivers,²⁷ as well as glaciers, forests, and other natural systems, legal personhood as well.28

4.1.1.3 Virtuous and Vicious Cycles of Rights and Environmental Rule of Law

Rights and environmental rule of law are interdependent: neither can exist without the other. Both substantive and procedural rights are important to realizing the environmental rule of law. Substantive rights include those in which the environment has a direct effect on the existence or the enjoyment of the right itself, such as the constitutional right to a healthy environment and the human rights listed in Figure 4.1.²⁹ In turn, the enjoyment of these substantive rights is particularly dependent upon the environment or vulnerable to environmental degradation. In fact, **the enjoyment of many rights depend**

- 28 LiveLaw 2017a; LiveLaw 2017b.
- 29 Knox 2012, para. 17.

¹⁹ Ecuador Constitution, ch. 7.

²⁰ IDLO 2014, 36.

Vilcabamba River v. Provincial Government of Loja, Provincial Justice Court of Loja, No. 11121-2011-10 (30 March 2011).

²² *See* Global Alliance for the Rights of Nature, <u>http://</u> <u>therightsofnature.org/</u>.

²³ Law 071 of the Plurinational State (Bolivia Law of the Rights of Mother Earth, 2010).

²⁴ For example, the U.S. Supreme Court found that corporations and unions had First Amendment rights to free speech under the U.S. Constitution. Citizens United v. Federal Elections Commission, 558 U.S. 310 (2010).

²⁵ Te Urewera Act 2014, sec. 11.

²⁶ Te Awa Tupua (Whanganui River Claims Settlement) Act 2017 (2017/7).

²⁷ The Supreme Court of India has stayed the decision.

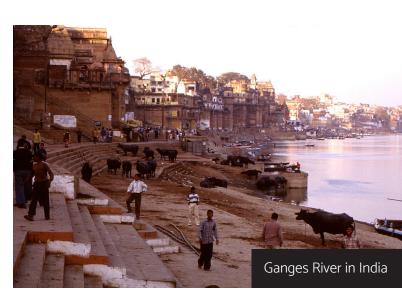
4. Rights

upon the environment: without clean air and water, food, and other natural resources, human life itself would not be possible as the environment itself provides food, water, and other necessities for life.³⁰ The environment offers the resources necessary to provide housing and to build livelihoods from which dignity and the right to an adequate standard of living can flourish. The 1972 United Nations Conference on the Human Environment—which marked the global birth of modern environmental law—found that the natural environment is "essential" to the enjoyment of basic human rights.³¹

The diminishment of environmental quality directly affects many rights. Pollution impacts

human health: in 2015, pollution caused an estimated 9 million premature deaths, which directly implicates the right to life.³² Climate change poses a direct risk to the identity of many island nations that might be destroyed by rising seas,³³ and unfair and excessive exploitation of resources harms indigenous rights and future generations.³⁴

As discussed extensively in the Justice and Civic Engagement chapters, *procedural rights, such as access to justice, access to information, and access to effective legal remedies, are critical elements of environmental rule of law because they provide the means for achieving environmental goals and laws*.³⁵ (For more procedural rights critical to environmental rule of law, see Figure 4.2) Many procedural rights are both human rights and



constitutional rights. Without any one of these elements, legal recourse for environmental harms will be greatly impaired, if not denied. For example, without meaningful access to justice, those harmed by environmental violations cannot petition for relief. And without legal remedies that rectify the harm and make whole those adversely affected, environmental rule of law cannot be realized.

Professor John Knox, the former UN Special Rapporteur on Human Rights and the Environment,³⁶ has described the relationship between substantive and procedural human rights and the environment as a "virtuous circle" whereby "strong compliance with procedural duties produces a healthier environment, which in turn contributes to a higher degree of compliance with substantive rights such as rights to life, health, property and privacy."³⁷

³⁰ OHCHR 2017, sec. 2 ("The full enjoyment of human rights, including the rights to life, health, food and water, depends on the services provided by ecosystems."); UNGA 2018a, prin. 1.

³¹ UNGA A/CONF.48/14/Rev.1, 1972, para. 1.

³² Landrigan et al. 2017.

³³ Permanent Mission of the Republic of Maldives to the United Nations Office at Geneva 2008; OHCHR 2009.

³⁴ See generally Knox 2012, paras. 18-24.

³⁵ Ibid., paras. 25-33.

In 2012, the UN Human Rights Council appointed John Knox as the Independent Expert, and later as Special Rapporteur, on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy, and sustainable environment. *See* <u>http://www.ohchr.org/EN/Issues/Environment// SREnvironment/Pages/SRenvironmentIndex.aspx</u>. In 2018, Professor David Boyd became the second Special Rapporteur on the topic.

³⁷ Knox 2012, para. 42.

Figure 4.2: Procedural Rights Critical to Environmental Rule of Law

Access to information

Public participation Access to justice Free, prior, & informed consent Mandatory environmental impact assessments Effective legal remedies Freedom of peaceful Free expression assembly Freedom of association

In the context of environmental rule of law, this analysis is incomplete without emphasizing the crucial role of a fourth element—the presence of a legal cause of action. A cause of action is a legal right or duty that protects environment-related values. Without a cause of action, which is part of the right of access to justice, procedural rights cannot produce the desired environmental outcome: a cause of action must exist to empower a court to act and the court must have access to effective methods of implementing its action.³⁸ For example, having the right to access a court has little meaning unless, once in court, the plaintiff can demonstrate that he or she has a legal right or duty to enforce by (1) showing the defendant is violating an environmental law, (2) seeking to enforce an environment-related right, or (3) citing a legal duty owed by the defendant.

This cause of action may be supplied by statutory environmental law, human rights law, the constitution, or other law. *The ability of human rights law and constitutional law to supply such causes of action—in addition to conventional statutory environmental* *law—enhances a rights-based approach to environmental rule of law*, as shown in Case Study 4.1. The court must have remedial powers to ensure that its order is effective in stopping the violation, making victims whole, and deterring future violations, as discussed extensively in the Justice chapter. Thus, in the environmental rule of law context, the virtuous circle has a legal cause of action paired with a legal remedy as its second of four elements, as shown in Figure 4.3.

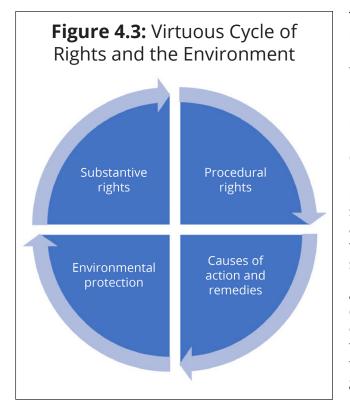
Rather than conceiving of the interrelationship of rights and the environment as a circle, it is a cycle that is an integral part of environmental rule of law. As discussed throughout this Report, improving environmental governance improves social justice and economic outcomes, which in turn strengthen human rights and environmental rule of law, which leads to further environmental improvements. These interdependent linkages of human rights and environmental rule of law form a cycle that can reinforce and build on each other's successes. Therefore, the "virtuous circle" may be more fully described in the environmental rule of law context as *a dynamic, virtuous* cycle whereby procedural rights coupled with substantive rights and legal duties lead to a healthier environment, which in turn contributes to better realization of *substantive rights*,³⁹ as shown in Figure 4.3.

For example, consider a community suffering from drinking water that is contaminated by acid mine drainage. If not addressed, this situation can foment social unrest. The community wants a court to order the mine owner to stop the drainage and supply potable water. To address this crisis, the community must first have access to justice. Meaningful access to a court, which is a procedural human right and component of environmental rule of law, is critical to start the process. The

³⁸ Professor Knox classifies legal remedies as procedural human rights. Ibid.

³⁹ See UNGA 2018a, prin. 2.

4. Rights



court must find a legal cause of action, which could derive from a right to clean water, a constitutional right to a healthy environment, obligations under an environmental statute, or other law or right, that empowers the court to require the mine owner to address the problem, and this must be coupled with an effective remedy to implement its directive to the mine owner. The court-ordered remedy must provide the desired environmental outcome—access to clean water. This in turn provides the third element, giving meaning and support to the community's substantive rights to water and health.⁴⁰ Traditional environmental laws and rightsbased approaches are both potential pathways for achieving environmental justice for this community within the environmental rule of law context. If environmental law is weak, then procedural and substantive rights—statutory, constitutional, or human may provide the basis for action, as in Case Study 4.1. If environmental laws and institutions are strong, then environmental provisions in the country's environmental statutes and constitution may provide ready access to courts and actionable rights or duties that result in clean water and, in the end, a stronger substantive right to clean water.

Although the example above has focused on courts, agencies and the executive branch can act in the place of courts, if they have the requisite legal authority. For example, if the community had the right to petition the government for action and the government had legal authority to act and effective means to provide clean water, then the same virtuous cycle exists.

Professor Knox points out that the virtuous circle works in reverse as well: without procedural rights, environmental degradation will continue and substantive rights will be harmed.⁴¹ As discussed above, it is important to add that without a cause of action and remedy, the same negative implications follow. In our example, without access to the court, a meaningful legal right or duty, and the availability of a legal remedy to address the acid mine drainage, the harms to water and the community will continue. The failure of any step in this process can thwart the community's search for justice. If any of these segments is missing, as shown in Figure 4.4, then a vicious cycle of lack of procedural human rights or lack of environmental rule of law will result in continuing environmental degradation and damage to substantive

⁴⁰ For cases where courts relied on the right to water and/or life to order government action, see Mazibuko and Others v. City of Johannesburg and Others (CCT 39/09) [2009] ZACC 28 and Civil Association for Equality and Justice v. City of Buenos Aires, Chamber for Administrative Matters of the City of Buenos Aires, 18 July 2007. *See also* Narain 2009-2010.

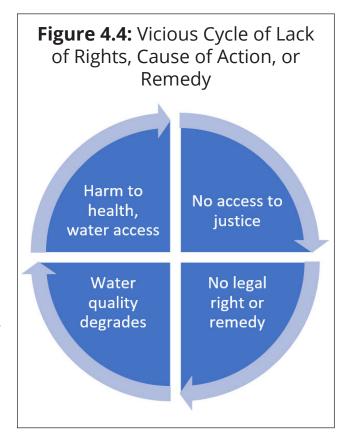
⁴¹ Knox 2012, para. 42.

rights. This undermines environmental rule of law, social justice, and sustainable development, weakening society as a whole.

Constitutional and human rights law may supply procedural or substantive rights that allow people to address environmental harms suffered when environmental laws are not sufficient. The inadequacies may be substantive (e.g., if there are gaps in the law) or political (e.g., environmental law is not viewed as a sufficient priority to enforce). Constitutional and human rights law can fill the gaps and elevate the importance of the underlying issues, leading to greater environmental rule of law. In turn, environmental protections support the realization of many constitutional and human rights. Thus, *rights and environmental* rule of law have an interdependence that simultaneously supports progress toward greater human dignity and environmental sustainability.

4.1.1.4 Rights-Based Approaches

At all levels—international, regional, national, and subnational—*countries have been recognizing and expanding upon the intersection of rights and the environment*. Countries in Africa, Europe, and the Americas have signed binding regional instruments upholding fundamental rights related to the environment. Major human rights conventions and treaties include the African Charter on Human and Peoples' Rights,⁴² the 2004 Revised Arab Charter on Human Rights,⁴³ and the Additional Protocol to the American Convention on Human Rights in the area of Economic, Social and Cultural Rights.⁴⁴



In an advisory opinion, the Inter-American Court on Human Rights has interpreted the American Convention on Human Rights to recognize both a human right to a healthy environment and the duty of states to avoid causing, directly or through activities over which they have control, either domestic or extraterritorial damage to the environment that infringes on the human right.⁴⁵ Similarly the European Court of Human Rights has held that the exercise of rights recognized by the European Convention on Human Rights⁴⁶ can be impaired by environmental harm and risks. In particular, the European Court of Human Rights has found that environmental risk or harm has resulted in violations of

^{42 &}lt;u>http://www.achpr.org/instruments/achpr/</u>, art. 24.

^{43 &}lt;u>http://www.humanrights.se/wp-content/</u>

uploads/2012/01/Arab-Charter-on-Human-Rights. pdf.

^{44 &}lt;u>http://www.oas.org/juridico/english/treaties/a-52.</u> <u>html</u>, art. 11.

⁴⁵ Inter-American Court of Human Rights, Opinión Consultiva OC-3-17de 15 de Noviembre de 2017, Solicatado por la República de Colombia, Medio Ambiente y Derechos Humanos.

^{46 &}lt;u>https://www.echr.coe.int/Documents/Convention</u> <u>ENG.pdf</u>.

article 2 of the Convention (the right to life), article 1 of Protocol 1 (the right to property), and article 8 (the right to respect for family and private life and home). The Court has also found a right to a healthy environment implied from the right to life and to private and family life. In regard to procedural rights, the Court has found violations of procedural rights exercised in conjunction with efforts to protect the environment or address environmental risks, including article 10 (right to freedom of expression), article 11 (right to freedom of assembly and association), and article 13 (right to an effective remedy).⁴⁷

Since the 1970s, environment-related rights have grown more rapidly than any other human right.⁴⁸ While no constitutions provided for such a right in 1946, by 2012 over 66 percent of constitutions incorporated a range of environment-related rights.⁴⁹ Including the right to life, which many courts have interpreted to include a right to a healthy environment, the percentage of countries with constitutional rights related to the environment is even greater.⁵⁰

The Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention),⁵¹ applicable in Europe and open to countries globally, requires that parties recognize procedural rights in environmental matters. States in the Americas

51 <u>http://www.unece.org/fileadmin/DAM/env/pp/</u><u>documents/cep43e.pdf</u>.

have adopted a similar convention, which also provides protections to environmental human rights defenders.⁵² Asian countries adopted the Association of Southeast Asian Nations Human Rights Declaration.⁵³

One of the benefits of using rights-based approaches in environmental matters is that numerous national constitutions and laws enumerate both substantive and procedural rights that protect the environment, public health, and welfare. 78 percent of countries recognize a right to life in their constitutions,⁵⁴ and courts in at least 20 countries have held that the right to a healthy environment is implied in other constitutional rights (such as the right to life).⁵⁵ Many national constitutions also provide for procedural rights as basic human rights.⁵⁶

4.1.2 Benefits

Taking a rights-based approach to improving environmental rule of law provides a strong impetus and means for implementing and enforcing environmental protections. Rightsbased approaches are often more agile and expansive than traditional regulatory approaches to environmental protection. Rights can be held collectively as well as individually, meaning that an individual or a community may be able to seek redress for an

⁴⁷ See, e.g., Oneryildiz v. Turkey; Budayeva and Others v. Russia; Guerra and Others v. Italy; Lopez Ostra v. Spain; Taskin and Others v. Turkey; Fadeyeva v. Russia; Di Sarno and Others v. Italy, finding violations of one or more of these provisions. ECHR 2018.
40 Interpretation 2012 2775

⁴⁸ Law and Versteeg 2012, 775.

⁴⁹ Ibid. (including the duty to protect the environment, civil or criminal liability for damaging the environment, right to information about the environment, right to compensation when the living environment is damaged, and the right to participate in environmental planning).

⁵⁰ See Box 4.2.

⁵² See Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean, <u>https://www.cepal.org/en/subsidiary-bodies/regional-agreement-access-information-public-participation-and-justice</u>. The Agreement opened for signature on September 27, 2018.

⁵³ ASEAN 2012. Principle 28 includes the "right to a safe, clean and sustainable environment" and the "right to safe drinking water and sanitation." Principle 9 addresses public participation and nondiscrimination, and principle 23 addresses access to information.

⁵⁴ Law and Versteeg 2012, 774.

⁵⁵ Boyd 2011.

⁵⁶ See May 2006, 113.

Box 4.1: Collective Human Rights

Historically, human rights have focused on the rights of individuals.^a In the last 50 years, though, there has been a growing recognition of collective human rights by regional human rights instruments, international instruments, national law, and substantial commentary.^b The first article of the two 1966 international human rights covenants (on civil and political rights, and on economic, cultural, and social rights) affirms the right of all "peoples" to self-determination. While many commentators argue that this article applies to states emerging from colonialism, indigenous peoples and ethnic minorities have embraced this language to advance their interests.^c

Collective rights (sometimes referred to as "group rights" or "peoples' rights") may be held by indigenous peoples, traditional communities, and ethnic minorities, as well as by trade unions, corporations, and other entities.^d Some of the more common collective rights include:

- Right to exist and self-determination,^e often including self-governance^f
- Right to "freely dispose of their wealth and natural resources"^g
- Right of cultural identity,^h including the right to economic, social, and cultural developmentⁱ
- Right to "a general satisfactory environment favorable to their development" or "protection of a healthy environment,"k including rights to natural resources necessary for fulfillment of other rights¹
- Right to exercise free, prior and informed consent regarding decisions that affect them and the resources upon which the depend^m
- Right of association, assembly, and freedom of expressionⁿ

Collective rights are particularly recognized where they are "are indispensable for their existence, wellbeing, and integral development" of a people (for example indigenous peoples).°

Criticisms of collective rights tend to focus on whether the rights asserted are actually rights, whether the rights are collective rights or individual rights, and the implications of recognizing collective rights.^p

<sup>a. Dinstein 1976; Freeman 1995.
b.</sup> *See, e.g.*, Ramcharan 1993.
c. *See* Freeman 1995.

d. Jones 2016; Bisaz 2012.

e. 1948 Universal Declaration of Human Rights, art. 1; 2007 UN Declaration on the Rights of Indigenous Peoples, art. 3; 1981 African Charter on Human and Peoples' Rights, art. 20(1); 2016 American Declaration on the Rights of Indigenous Peoples, art. III.

f. 2007 UN Declaration on the Rights of Indigenous Peoples, art. 4; 2016 American Declaration on the

4. Rights

Rights of Indigenous Peoples, arts. VI, XXI-XXII.

- g. 1981 African Charter on Human and Peoples' Rights, art. 21(1).
- h. 2007 UN Declaration on the Rights of Indigenous Peoples, arts. 5, 11-15, 33; 2016 American Declaration on the Rights of Indigenous Peoples, arts. X, XIII-XVI; Jovanovic 2005; Barzilai 2005.
- i. 1981 African Charter on Human and Peoples' Rights, art. 22(1); 2016 American Declaration on the Rights of Indigenous Peoples, art. III.
- j. 1981 African Charter on Human and Peoples' Rights, art. 24(1).
- k. 2016 American Declaration on the Rights of Indigenous Peoples, art. XIX.
- I. 2007 UN Declaration on the Rights of Indigenous Peoples, arts. 8(2)(b), 10, 25-29; 2016 American Declaration on the Rights of Indigenous Peoples, art. XXV.
- m. 2007 UN Declaration on the Rights of Indigenous Peoples, arts. 19, 32; 1989 Indigenous and Tribal Peoples' Convention (No. 169), art. 16.
- n. 2016 American Declaration on the Rights of Indigenous Peoples, art. XX.
- o. Ibid., art. VI.
- p. Jones 2016; Bisaz 2012.

environmental harm (see Box 4.1). The right to water, for example, gives an individual person a right to have access to water and, therefore, to sue to enforce this right in court. Most environmental statutes impose obligations on a particular actor and charge the government with a duty to enforce this obligation. For example, most water laws require those wishing to discharge pollutants to water to obtain a permit from the government before doing so.

A rights-based approach can make it easier for those harmed to access courts and bring claims as well. Environmental

statutes may allow citizens to enforce the laws' provisions, but as discussed in the Justice chapter, access to the courts can be significantly constrained. Most environmental statutes empower agencies, not citizens, to act. By contrast, citizens usually can enforce a constitutional right because the right accrues to the individual suing, meaning it will be easier for them to access justice. For example, Costa Rica's constitution, article 48, establishes the *amparo* right of action, under which any person may bring suit to defend a constitutional right, and article 50 guarantees a right to healthy and ecologically balanced environment. A 1994 ruling established the principle of intereses difusos, which allows

individuals to bring actions on behalf of the public interest, including environmental protection. Thousands of petitions have been filed on the basis of these rights—14,963 in 2012 alone.⁵⁷

Constitutional and human rights law is more established, expansive, and flexible than environmental law. Constitutional and human rights are often recognized at multiple levels—subnationally, nationally, regionally, and internationally. *Thus, there is typically* a wider variety of remedies and fora in *which to seek relief* than those provided by a national environmental law alone. When two Romanian citizens were denied redress through local and national mechanisms for exposure to contaminants released by mining operations, they appealed to the European Court of Human Rights to enforce article 8 of the European Convention on Human Rights and Fundamental Freedoms, which guarantees the right of respect for privacy and family life.58 The Court held that Romania had failed to fulfil its obligations under article 8

⁵⁷ OHCHR n.d.

⁵⁸ European Court of Human Rights, Tătar v. Romania, Judgment (Merits and Satisfaction), January 27, 2009; Shelton 2010, 106; see also Okyay and Others v. Turkey (relying on article 6 of the Convention, guaranteeing a right to a fair hearing).

when it did not adequately assess the possible risks of the mining operations and when it did not provide adequate access to information on the mine. And in seeking redress for the impacts of climate change, Filipino citizens and human rights and environmental civil society organizations petitioned the Commission on Human Rights of the Philippines to investigate human rights violations caused by 47 corporations due to their contribution to greenhouse gas emissions.⁵⁹ The Commission accepted the petition.⁶⁰

Constitutional and human rights are wellestablished with a longer history than many environmental protections. Therefore, some courts may be more comfortable relying on long-standing legal doctrines with which they are familiar than on new and less familiar environmental provisions. Finally, countries may continue to expand constitutional and human rights, meaning new rights can emerge to strengthen environmental protection, as noted in Section 4.1.1.2.

Constitutional law and human rights law provide an important safety net when there are gaps in existing legislation. As discussed above, constitutional and human rights most often implicated with environmental issues include the rights to life, health, water, food, and a healthy environment, where those rights are recognized. These rights can provide the legal basis for citizens to seek redress for environmental harms for which there might not be a remedy under traditional environmental law or when the implementation of environmental law has fallen short in providing meaningful remedies.

Rights-based approaches can provide important norms and forums for addressing climate change, especially in instances when

a country has yet to act. Climate change has a wide range of impacts on constitutional and human rights, including the rights to life, food, water, health, property, livelihood, selfdetermination, and an adequate standard of living. The preamble to the December 2015 Paris Agreement states:

acknowledging that 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.⁶¹

As discussed below and in Case Study 4.2, courts have increasingly recognized that constitutional and human rights law create duties for governments to take actions to mitigate climate emissions and to adapt to climate change—measures that are necessary to protect various rights affected by climate change. For example, in a case that brought attention to the importance of government action in adapting to the impacts of climate change, citizens of Tyrnauz, Russia, brought suit against the government when mudslides killed eight people.62 The government had failed to maintain city infrastructure, which contributed to the disaster. The European Court of Human Rights found that under the right-to-life provision of the European Convention on Human Rights, Russian authorities were responsible for addressing known hazards including mudslides and other climaterelated risks—and for failing to act.

⁵⁹ Greenpeace Southeast Asia et al. v. Chevron et al., Case No. CHR-NI-2016-0001.

⁶⁰ Commission on Human Rights, Republic of the Philippines 2018.

⁶¹ Paris Agreement, C.N.92.2016.TREATIES-XXVII.7.d of 17 March 2016.

⁶² Budayeva and Others v. Russia 2008.

Linking environmental harms to constitutional and human rights also heightens the profile of environmental issues by connecting the importance of the environment to human well-being. Then-

UN Secretary-General Kofi Annan praised a rights-based approach to environmental protection because it "describes situations not simply in terms of human needs, or of development requirements, but in terms of society's obligations to respond to the inalienable rights of individuals."63 Highlighting a human-right violation will often present a greater imperative for authorities to act and therefore may be more likely to generate action.⁶⁴ Numerous cases in India demonstrate the use of the constitutional right-to-life provision, article 21, to elevate environmental concerns.⁶⁵ Despite the existence of environmental provisions in the Indian constitution (articles 48 and 51), the violations of the constitutional right to life were the primary basis for court orders to take measures to address the environmental harms caused by private activities.⁶⁶

A human rights approach could also strengthen environmental rule of law through application of the nonregression

principle. Nonregression has its origins in human rights law, and it means that States may not allow the deterioration of these rights "unless there are strong justifications for a retrogressive measure."⁶⁷ Thus, in the absence of strong justifications, environmental laws and regulations should not be weakened, but only maintained and strengthened. The Rio+20 Declaration, para. 20, states that it is "critical that we do not backtrack" from the Rio Declaration commitments, and the Paris Agreement

65 Vellore Citizens Welfare Forum v. Union of India and Others 1996.

provides that Parties commit to progressively stringent reductions in greenhouse gas emissions.⁶⁸ Countries are starting to incorporate the principle of nonregression regarding environmental progress. For example, the European Union's Lisbon Treaty, art. 2, para. 3, applies the principle to the environment,⁶⁹ as have several national courts.⁷⁰

Use of rights-based approaches to environmental issues promises to greatly advance both the underlying rights and environmental protection by increasing legitimacy in both areas.⁷¹ *Environmental* laws, policies, and decisions may be strengthened when agencies and institutions integrate constitutional or human rights into their decision making and activities. The UN Special Rapporteur on Human Rights and the Environment has recommended that governments mainstream human rights into their development and environmental agencies.⁷² A single law or policy may help to align and coordinate diverse interests and provide co-benefits when disparate elements, including constitutional protections, human rights, environmental principles, and anti-poverty measures, are unified into a single law, policy, or program. For example, Kenya sought to achieve the Millennium Development Goal related to water and sanitation by creating a right to water in its 2010 constitution and enacting a 2016 water law that created a holistic

⁶³ Annan 1998.

⁶⁴ Shelton 2010, 97.

⁶⁶ Indian Bar Association 2013.

⁶⁷ OHCHR 2008a; see generally Dadomo 2004.

^{68 &}lt;u>C.N.92.2016</u>.TREATIES-XXVII.7.d of 17 March 2016, art. 4(3) ("Each Party's successive nationally determined contribution shall represent a progression beyond the Party's then current nationally determined contribution...").

⁶⁹ Prieur 2012.

⁷⁰ Jacobs v. Flemish Region (1999) Council of State No. 80.018, 29 April 1999. Venter (1999) Council of State No. 82.130, 20 August 1999. Constitutional Court of Hungary. 1994. Judgment 28, V. 20 AB, p.1919, cited in Boyd 2013.

⁷¹ OHCHR and UNEP 2012.

⁷² OHCHR 2015a.

Case Study 4.2: Climate Change, Rights, and Environmental Rule of Law in the Netherlands and Pakistan

Rights-based approaches are already focusing governments' attention on climate change and urging stronger action. Cases in Pakistan and the Netherlands demonstrate the impact these approaches can have.

Ashar Lghari, a Pakistani farmer, sued his national government for its failure to implement the 2012 National Climate Policy and Framework. In 2015, the Lahore (Pakistan) High Court Green Bench relied on "fundamental rights," such as the Pakistani Constitution's rights to life, dignity, and a healthy and clean environment, and on "international environmental principles," such as the precautionary principle, to order several Pakistani ministries to implement the Policy and Framework.^a The Court ordered the ministries to nominate focal points to ensure implementation of the Policy and Framework and created a Climate Change Commission with representatives from ministries, civil society, and technical experts to help the court monitor progress in implementing the Court's order.

In the Netherlands, a nongovernmental organization, Urgenda, sued the Dutch government for not taking strong enough action to reduce greenhouse gas emissions to combat climate change. The Hague District Court concluded that the government's actions were insufficient and thus that it had breached the duty of care owed to Dutch citizens. In deciding, the Court looked at articles 2 (right to life) and 8 (respect for private and family life) of the European Convention on Human Rights, among other provisions in international agreements. The court ordered the Government to decrease greenhouse emissions by at least 25 percent by 2020, instead of the 14-17 percent levels that the Government had planned. In October 2018, an appeals court ffirmed and reinforced the decision.

- a. Asghar Leghari v. Federation of Pakistan (W.P. No. 25501/2015).
- b. Urgenda Foundation v. The State of the Netherlands, C/09/456689/HA ZA 13-1396 (24 June 2015).
- c. Spijkers 2017.

government approach toward better water infrastructure.⁷³ And South Africa created the National Development Plan 2030, which seeks to achieve both sustainable development and rights-based goals.⁷⁴

One example of such an alignment of human rights and environmental sustainability is

the Sustainable Development Goals.⁷⁵ In implementing the Sustainable Development Goals, nations have the opportunity to protect human rights that are integrally related to environmental protection. Governments may strengthen implementation by taking account of underlying constitutional and human rights when implementing the Goals. The Framework Principles on Human Rights

⁷³ Wekesa 2013; UNDP 2012; KEWASNET 2017._

⁷⁴ South African National Planning Commission 2012.

⁷⁵ OHCHR 2015b.

and the Environment developed by the UN Special Rapporteur on Human Rights and the Environment emphasize the duties of States under international law to ensure that human rights related to the environment are protected in the context of the Sustainable Development Goals.⁷⁶ Similarly, numerous international agencies, such as the United Nations Development Programme and UNICEF, have developed programmatic materials that explicitly incorporate human rights in their implementation.⁷⁷

4.1.3 Implementation Challenges

Using rights-based approaches to environmental protection faces several implementation challenges, including those related to resource allocation, political will, capacity, and consideration of other social development goals implicit in such an approach.

Many countries lack the resources or the political will to aggressively pursue social and economic rights. There are

myriad causes for these shortcomings, but a lack of financial resources, technical expertise, and information can be significant impediments, as discussed in Case Study 4.3. Many governments struggle to mobilize resources for core functions of environmental institutions like monitoring ambient environmental conditions, transparent development of regulations and permits, and compliance assurance. Often, governments do not have funds to adequately support human rights commissions or tribunals, and in-country experience with constitutional and human rights matters may be limited. In addition, citizens may be unaware of their rights under human rights treaties as well as under national constitutions and laws,

meaning they are unaware of the recourse they might have. The many ways in which access to justice is limited for environmental protections, which are discussed extensively in the Justice chapter, apply to pursuit of constitutional and human rights protections as well.

When a government does not implement rights protections, it often falls to courts to hear citizen complaints and order corrective actions, as discussed in Case Studies 4.1, 4.2, and 4.3. But courts are often underresourced themselves, may lack technical expertise, and may lack the legal powers to effectively provide recourse for citizens, as discussed in the Justice chapter. Courts may also be reluctant to find government officials guilty of human rights violations due to internal ramifications of such decisions, such as political pressure and being accused of fomenting dissent. In some instances, courts might be most effective when they prod institutions responsible for environmental protection to overcome political and bureaucratic logjams and implement policy. For example, the Supreme Court of India played a central role in pushing environmental officials to develop and implement policies to reduce air pollution, particularly switching public buses to cleaner fuel.78

In some countries, although a right may appear in a constitution, the right may not be actionable by citizens or in court. Some constitutional rights, particularly environmental rights, are written as or interpreted by courts as being nonbinding statements of policy. For example, according to state courts, the U.S. state of Illinois' constitutional provision for a healthful environment is not a fundamental right and cannot be used by citizens to bring suit in court, even when government action

⁷⁶ UNGA 2018a.

⁷⁷ See, e.g., OHCHR and UNEP 2012; UNDP 2012.

⁷⁸ Bell and Narain 2005.

threatens direct environmental harm.⁷⁹ Other constitutional provisions can only be made actionable through an act of the legislature. For example, Nigeria's courts have held that the constitutional directive that the state "protect and improve the environment and safeguard the water, air and land, forest and wild life of Nigeria"80 must be given force through legislative actions and cannot support direct citizen enforcement of it in court.⁸¹ And as discussed in the Justice chapter, the concept of standing often precludes the general public from suing to enforce constitutional rights.⁸² States like South Africa have overcome this barrier by explicitly allowing citizens to sue in their own interest, the public interest, and as a member of a group or class for violations of the constitutional right to a healthy environment.83

Another challenge with rights-based approaches is that rights tend to be broadly worded. As such, articulated rights tend to lack the specificity of standards, mechanisms, and procedures that are often found in legislation. These rights often advance a specific objective, and it is unclear how to resolve situations with competing or overlapping rights. The generality of rights means that a rights-based approach is more suitable for policy direction and for protecting people from the most egregious actions, rather than as a substitute for environmental regulation and enforcement.

Rights-based approaches can be limited by their focus on human beings and often solely on living human beings. As noted above, a human rights-based approach fails to acknowledge inherent rights in nature independent of anthropocentric values

placed on resources and the environment. Moreover, historically, most human rights have focused on the rights of living individuals to a particular outcome. With growing recognition of the rights of future generations, this is slowly changing.⁸⁴ A defining feature of environmental rule of law is the fact that it deals with issues such as climate change, species extinction, and toxic pollution that often cause impacts over extended time horizons, as long as centuries. Environmental rule of law also often must grapple with uncertainty and risks to future generations weighed against costs to the current generation.

Despite these limitations, constitutional and human rights offer an important, often supplementary means to promote environmental rule of law, in part by offering additional venues for challenging environmental wrongs, in part by elevating the importance of the environment and environment-related rights, and in part by serving as a safety net when environmental statutes do not squarely address an environmental problem. These are discussed below.

4.2 Right to a Healthy Environment

Many countries now recognize a right to a healthy environment as a constitutional or statutory right.⁸⁵ This right asserts that the environment must meet certain basic benchmarks of healthfulness and includes affirmative substantive rights, such as the right to clean air and water, and defensive substantive rights, such as the right to be

⁷⁹ Tuholske 2015.

⁸⁰ Constitution of Nigeria, sec. 20.

⁸¹ Burns 2016.

⁸² See infra Section 5.2.1.

⁸³ Constitution of South Africa (1996), ch. 2, sec 28.

⁸⁴ Lewis 2017; Lawrence 2014; Page 2006.

⁸⁵ Boyd 2018

Case Study 4.3: Progressive Realization of the Right to Water in South Africa

In 1996, South Africa adopted a new constitution that includes a constitutional right to water and a requirement that the state "take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of these rights."^a In order to implement this right, South Africa passed legislation, promulgated regulations, and developed a strategic framework. It has made significant progress, but has not yet fulfilled the rights to water and sanitation for an estimated 7-15 percent of the population. Those who have yet to receive basic water and sanitation services typically live in the poorest regions of the country. The South African Human Rights Commission reported in 2014 that 11 percent of households do not have any sanitation and that 26 percent of households in certain areas lack adequate services due to poor and deteriorating systems. High percentages of households in the rural former apartheidera homelands lack any of these services.^b So has the rights-based approach failed?

In 2000, the South African Constitutional Court ruled that the South African government must make reasonable efforts toward the progressive realization of such rights.^c It held that the Constitution's right of access to adequate housing meant that the government had an obligation to take reasonable legislative and other measures to achieve progressive realization of this right within the confines of available resources. Therefore, the Court examined the government's efforts toward providing housing against this standard and would apply the same analysis to the right to water.

When it examined the fact that many in South Africa remain without access to clean water, the South African Human Rights Commission recommended changes at the national, provincial, and local levels.^d It called for budgets and decisions that are transparent and for the engagement of communities in budgeting and development decisions. It also noted that decision makers should consider the needs of different groups in providing access, including the safety of women and girls. The right to water and sanitation is not to be traded off against other social and economic rights, according to the Commission.

Additionally, the Commission required the national government to provide additional technical assistance and financial support to ensure that local governments are able to implement the mandate and to upgrade and repair water and waste water treatment plants that are not functional. Thus, while providing a constitutional right can provide other means towards achieving an environmental goal, it is not a panacea. Governments cannot give what they do not have, and courts will look at all of the circumstances before ordering a remedy.

d. Ibid.

a. Constitution of South Africa, sec. 27.1, 27.2.

b. South African Human Rights Commission 2014.

c. Government of the Republic of South Africa v. Grootboom [2000] ZACC 19.

4. Rights

free from toxic wastes or pollution.⁸⁶ **A right** to a healthy environment strengthens environmental rule of law by encouraging stronger environmental statutes, filling gaps in existing law, providing procedural protections, and highlighting the importance of environmental law in society.⁸⁷

The right to a healthy environment⁸⁸ may be referred to as a "fundamental environmental right"⁸⁹ and may be phrased in many ways, including a "right to a clean environment"90 or the right to a "balanced environment that shows due respect for health."91 The 2007 Malé Declaration on the Human Dimension of Climate Change, adopted by small island developing states, refers to the right as "the right to an environment capable of supporting human society and the full enjoyment of human rights."92 The breadth of the right means that its particular contours are often left to interpretation by legislatures, courts, and other implementing bodies. It would be a mistake, though, to think that the generality of the right makes it merely hortatory; courts

- 88 Constitution of the Republic of Hungary (1949), para. 18.
- 89 May 2006.
- 90 International Institute for Democracy and Electoral Assistance 2015, para. 30.
- 91 French Charter for the Environment 2005.
- 92 Adopted November 14, 2007. <u>http://www.ciel.org/</u> <u>Publications/Male_Declaration_Nov07.pdf</u>.

in dozens of countries have held that the constitutional right to a healthy environment is binding.⁹³

The right to a healthy environment is most often found in national constitutions.94 As shown in Figure 4.5, 150 countries have environmental provisions in their constitutions, expressed in a variety of ways (most commonly as an individual right or a state duty).⁹⁵ In addition, many countries have statutory rights to a healthy environment that either give statutory meaning to the constitutional right⁹⁶ or exist without a corresponding constitutional right.⁹⁷ A right implemented through the national constitution has more force because it is the supreme law of the land applicable to all levels of government and trumps any national or subnational *statutory law*. A right implemented through statute is also an important right, but will be subordinate to any constitutional rights deemed at odds with the statutory right; is subject to interpretation when it is deemed at odds with other statutes; and may only apply to specified levels of government—in federal countries, national laws may bind states or provinces only in certain conditions specified by the constitution. As of 2012, courts in at least 44 nations had issued

- 96 *See, e.g.*, South Africa's National Environmental Management Act, which was born from its constitutional right to a clean environment; Kotzé and du Plessis 2010.
- 97 The United States' National Environmental Policy Act provides that "each person should enjoy a healthful environment and that each person has a responsibility to contribute to the preservation of the environment" but provides no way for citizens to actuate this declaration. 42 U.S.C. sec 4331(c).

E.g., Constitution of South Africa (1996), sec. 24
("Everyone has a right: (a) To an environment that is not harmful to their health or well-being" Article 35 (1) of the Constitution of the Republic of Korea reads "All citizens shall have the right to a healthy and pleasant environment. The State and all citizens shall endeavor to protect the environment.").

⁸⁷ Knox 2012, 15 ("the recognition of such rights can lead to the enactment of stronger environmental laws, provide a safety net to protect against gaps in statutory environmental laws, raise the profile and importance of environmental protection as compared to competing interests such as economic development, and create opportunities for better access to justice and accountability"); Boyd 2012a; May and Daly 2014; Bruch, Coker, and Van Arsdale 2007.

⁹³ Bruch et al. 2007.

⁹⁴ May 2006.

⁹⁵ The tally includes 88 countries with constitutions enshrining a right to a healthy environment and 62 additional countries that have other environmental provisions that are not explicitly rights, for a total of 150 countries.

decisions enforcing the constitutional right to a healthy environment.⁹⁸

Courts that have enforced the right to a healthy environment have articulated and developed both substantive and procedural rights. Courts have also ruled that governments have duties corresponding to a right to the constitutional right to a healthy environment: they must (1) not act to infringe upon the right; (2) protect the right from infringement by third parties; and (3) take actions to fulfill the right.⁹⁹ As examples, States have been (1) prohibited from awarding forest concessions harmful to the environment;¹⁰⁰ (2) required to issue regulations or to implement and enforce existing regulations to curb behavior harmful to the environment;¹⁰¹ and (3) ordered to clean-up entire watersheds.¹⁰²

A constitutional right to a healthy environment can support the enactment of stronger environmental laws. One researcher

found that after adopting a constitutional right to a healthy environment, 78 of 95 nations strengthened their environmental laws.¹⁰³ In addition, countries often enact environmental laws to give force and meaning to the constitutional right. Enabling statutes can explicate the rights given by the constitutional provision, appoint agencies to oversee implementation of the right, and provide specific causes of actions and penalties for infraction of the right. For example, after enacting a constitutional right to a healthy environment, Argentina and its provinces passed new environmental laws, as did Brazil, Colombia, Costa Rica, France, the Philippines, Portugal, and South Africa.¹⁰⁴

In Mexico, the 2012 constitutional reform codifying the right to water also mandated that legislators enact a general water statute within 360 days. The General Water Law helps to implement the new right by regulating and ensuring access to safe drinking water and sanitation.¹⁰⁵ The constitutional reform is also the driving force for the 2014-2018 National Water Program.

A constitutional right to a healthy environment can provide a critical safety net for redress of environmental harms not otherwise addressed by the law. As discussed throughout this chapter, and as illustrated in Case Study 4.4, a rights-based approach can provide legal rights and duties, both substantive and procedural, that traditional environmental law may lack. A constitutional right to a healthy environment may provide an avenue to seek redress in court, for example spurring a government to act to mitigate or adapt to climate change (discussed in Section 4.1.2). In 2009, the Costa Rican Constitutional Court ordered the government to promulgate fishing regulations based upon the constitutional right to a healthy environment.¹⁰⁶ In addition, the constitutional right can serve as a gap-filling provision when environmental laws are found to have flaws or gaps such that certain harms are not addressed or redress is not available. Environmental laws can be guite technical and complex, and a constitutional right can guard against unintentional omissions by legislative drafters. For example, in Hungary, the constitutional right to environmental health prevented an amendment to the agricultural law from privatizing protected land.¹⁰⁷ And in India, residents subject to "slow poisoning" due to poor sanitation are protected by the constitutional right to environmental

107 Bruch et al. 2007.

⁹⁸ Boyd 2013.

⁹⁹ OHCHR 2015a, 2; Boyd 2013, 13.

¹⁰⁰ *See* discussion of the Philippines Supreme Court enjoining the Philippines from awarding certain forest concessions later in this subsection.

¹⁰¹ See Case Studies 4.1 and 4.3.

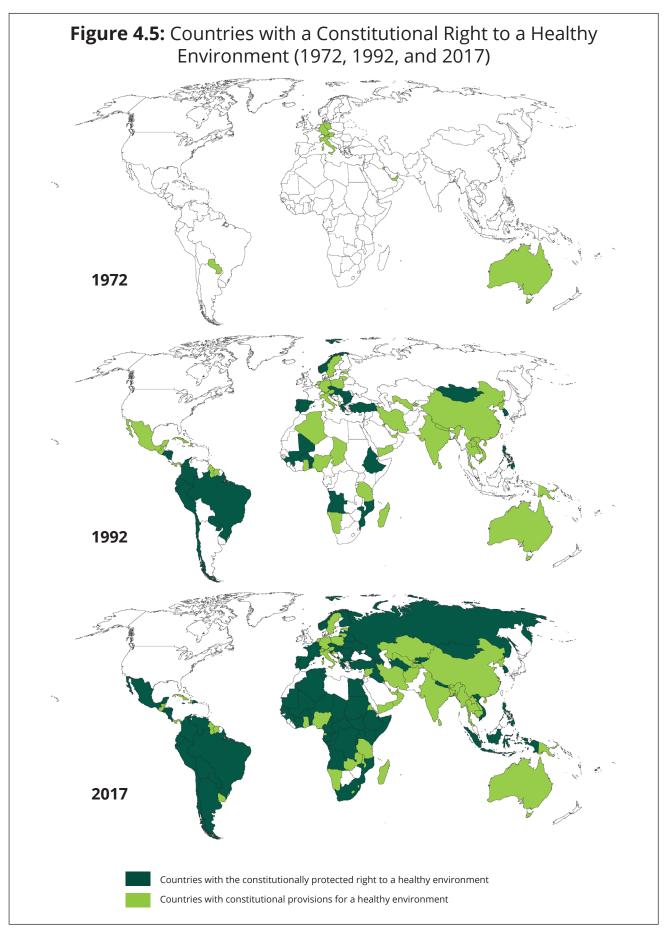
¹⁰² See Case Study 4.4.

¹⁰³ Boyd 2013.

¹⁰⁴ Ibid.

¹⁰⁵ Diario Oficial de la Federacion 2014.

¹⁰⁶ Asociación Interamericana para la Defensa del Ambiente y Otros, Costa Rican Constitutional Court (2009).



Year	Countries with the constitutionally protected right to a healthy environment	Countries with constitutional provisions for a healthy environment
1972		Australia, Austria, Germany, Italy, Kuwait, Malta, Paraguay, United Arab Emirates
1992	Angola, Benin, Brazil, Bulgaria, Burkina Faso, Cabo Verde, Chile, Colombia, Ecuador, El Salvador, Ethiopia, Greece, Guinea, Honduras, Hungary, Mali, Mongolia, Mozambique, Nicaragua, Norway, Paraguay, Peru, Philippines, Portugal, Republic of Korea, Romania, Sao Tome and Principe, Slovakia, Slovenia, Spain, Togo, Turkey	Albania, Algeria, Australia, Austria, Bahrain, Chad, China, Cuba, Democratic People's Republic of Korea, Estonia, Germany, Ghana, Guatemala, Guyana, Haiti, India, Iran, Italy, Kuwait, Laos, Lithuania, Madagascar, Malta, Mauritius, Mexico, Micronesia, Namibia, Nepal, Netherlands, Nigeria, Palau, Panama, Papua New Guinea, Poland, San Marino, Sri Lanka, Suriname, Sweden, Tanzania, Thailand, United Arab Emirates, Uzbekistan, Vanuatu, Viet Nam, Yemen
2017	 Algeria, Andorra, Angola, Argentina, Armenia, Azerbaijan, Belarus, Belgium, Benin, Bolivia, Brazil, Bulgaria, Burkina Faso, Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Chile, Colombia, Comoros, Congo, Costa Rica, Côte d'Ivoire, Czech Republic, Democratic Republic of the Congo, Dominican Republic, Ecuador, Egypt, El Salvador, Ethiopia, Fiji, Finland, France, Gabon, Georgia, Greece, Guinea, Honduras, Hungary, Indonesia, Iraq, Jamaica, Kenya, Kyrgyzstan, Latvia, Maldives, Mali, Mauritania, Mexico, Mongolia, Montenegro, Morocco, Mozambique, Nepal, Nicaragua, Niger, Norway, Paraguay, Peru, Philippines, Portugal, Republic of Korea, Republic of Moldova, Romania, Russia, Rwanda, Sao Tome and Principe, Senegal, Serbia, Seychelles, Slovakia, Slovenia, Somalia, South Africa, South Sudan, Spain, Sudan, The former Yugoslav Republic of Macedonia, Timor-Leste, Togo, Tunisia, Turkey, Turkmenistan, Uganda, Ukraine, Venezuela, 	Afghanistan, Albania, Australia, Austria, Bahrain, Bangladesh, Belize, Bhutan, Cambodia, China, Croatia, Cuba, Democratic People's Republic of Korea, Equatorial Guinea, Eritrea, Estonia, Eswatini, Gambia, Germany, Ghana, Guatemala, Guyana, Haiti, India, Iran, Italy, Kazakhstan, Kuwait, Laos, Lesotho, Lithuania, Luxembourg, Madagascar, Malawi, Malta, Mauritius, Micronesia, Myanmar, Namibia, Netherlands, Nigeria, Oman, Palau, Panama, Papua New Guinea, Poland, Qatar, San Marino, Sri Lanka, Suriname, Sweden, Switzerland, Syria, Tajikistan, Tanzania, Thailand, United Arab Emirates, Uruguay, Uzbekistan, Vanuatu, Yemen, Zambia

health, without having to prove specific injury.¹⁰⁸ In some instances, environmental law lags behind technological developments, so a general right to healthy environment can provide a measure of justice until the legislature enacts legislation.

Providing for environment-related rights can help ensure better opportunities for

access to justice and accountability of the government and other actors. For

example, when the Philippine government was issuing timber concessions that may have endangered the sustainability of future forests, the Supreme Court of the Philippines found that the constitutional right to a healthy environment applied to future generations and required the government to manage natural resources for the benefit of both

¹⁰⁸ Ibid.

Case Study 4.4: Argentina's Supreme Court Orders Comprehensive Environmental Response

Beatriz Mendoza and a group of other impoverished residents of the Matanza-Riachuelo River basin, a heavily polluted area of Buenos Aires, filed suit against the federal, provincial, and municipal governments and 44 industrial polluters. They relied in part on section 41 of the Argentine Constitution, which guarantees a right to a "healthy and balanced environment fit for human development." The Supreme Court of Argentina recognized the standing of three additional organizations that had an interest in the collective right to a healthy environment.^a It ordered an environmental assessment of the watershed in 2006 and ordered the government to draft a cleanup and restoration plan to be reviewed by university scientists in 2007. In 2008, based on this plan, it issued a comprehensive cleanup order designed to improve residents' quality of life and restore the river basin environment.^b The order required that the government provide for a system of public information about the cleanup; eliminate industrial pollution; improve drinking water, sewage, and stormwater systems; establish health programs for residents; and establish a committee of nongovernmental organizations together with a national ombudsman to monitor compliance. The Argentine government established a watershed authority to implement the plan, coordinate activities, and monitor and enforce compliance.^c The World Bank has approved US\$2 billion to support the project.^d

b. Ibid.

d. World Bank 2009.

present and future people.¹⁰⁹ In Brazil, the constitutional right to a healthy environment gave the public and nongovernmental organizations access to the independent Ministério Público to report and ask for action on environmental violations. Enforcement of environmental laws increased dramatically as a result: between 1984 and 2004, the Ministério Público filed over 4,000 public civil actions in the state of São Paolo alone on environmental topics such as deforestation and air pollution.¹¹⁰ **Enshrining a right to a healthy environment in a constitution elevates the importance of environmental law.** It gives the environment and public health a place alongside the rights to liberty, social justice, and property, in constitutions that recognize these rights, establishing that the environment occupies a central place in national civic life. According to former Justice Mahomed of Namibia, a country's constitution is "a mirror reflecting the national soul."¹¹¹

A right to a healthy environment exists in regional and subnational legal instruments

Supreme Court of Argentina (CSJN), "Mendoza, Beatriz Silvia y otros c/ Estado Nacional y otros s/ daños y perjuicios (daños derivados de la contaminación ambiental del Río Matanza - Riachuelo)" (8/7/2008), Fallos 331:1622. Causa Mendoza, fs. 75/76.

c. Boyd 2012b.

¹⁰⁹ Minors Oposa v. Secretary of the Department of Environmental and Natural Resources 1993.110 McAllister 2008.

¹¹¹ State v. Acheson 1991 (2) SA 805 (Namibia) 813 A-B (1991 NR 1, 10A-B).

as well. More than 130 nations are party to treaties and institutions that recognize the human right to a healthy environment.¹¹² Many subnational constitutions contain environment-related rights.¹¹³ The constitutions of all 26 Brazilian states contain provisions protecting the environment,¹¹⁴ while roughly 60 percent of U.S. state constitutions contain provisions regarding the environment or natural resources.115 Supranational and subnational recognition of the right to a healthy environment can be important as well.¹¹⁶ Supranational provisions can help to encourage national governments to exercise caution when considering whether to backslide, while subnational provisions can set an example for national governments and offer legal recourse that might not otherwise be available to citizens.

National legislative rights to a healthy environment are also helpful in securing environmental rule of law. They can provide actionable rights to citizens and place duties on agencies that are the bedrock of environmental law. They can also ultimately lead to the adoption of a corresponding constitutional or human right under national law. For example, the Indonesia Environmental Management Act, enacted in 1997, recognizes the right to a healthy environment as well as the right to public access to environmental information and the right to participate in environmental decision making.¹¹⁷ The Act also guarantees various environmental procedural rights, such as the right of nongovernmental organizations to bring lawsuits on behalf of others. In 1988, the People's National Assembly promulgated the National Human Rights Charter, which recognizes "every person's right to a good and healthy environment."¹¹⁸

In addition to an explicit right to a healthy environment, other environment-related rights are often interpreted or understood to include a right to healthy environment—in recognition of the fact that environmental factors and considerations are essential to the realization of these other rights. Environmentrelated rights include, for example, the right to life (see Box 4.2), right to health,¹¹⁹ rights related to family and privacy, and rights related to indigenous culture and identity.¹²⁰

4.3 Right to Nondiscrimination and Rights of Marginalized Populations

The right to be equal before the law (often referred to as "nondiscrimination") and the rights of marginalized populations (and their members)¹²¹ require governments to apply environmental law in a manner that is nondiscriminatory and does not disadvantage those who rely on natural resources most heavily. These rights help protect women and children, who can be particularly vulnerable

¹¹² Boyd 2013.

¹¹³ May and Daly 2014. Countries referring to the environment in subnational constitutions include Austria, Argentina, Brazil, Ethiopia, Germany, India, Iraq, the Netherlands, the Philippines, and the United States. May 2017.

¹¹⁴ McAllister 2008.

¹¹⁵ Anton and Shelton 2011; see generally May and Daly 2014.

¹¹⁶ For example, the Inter-American Court of Human Rights plays an important role in enforcing national obligations to uphold environment-related rights. *See, e.g.*, Inter-American Court of Human Rights, Opini⊕n Consultiva OC-3-17de 15 de Noviembre de 2017, Solicatado por la República de Colombia, Medio Ambiente y Derechos Humanos.

¹¹⁷ Indonesia Environmental Management Act (1997), art. 5(1).

¹¹⁸ Legislation No. 39 of 1999 Concerning Human Rights, State Gazette of the Republic of Indonesia No. 165 of 1999, ch. 3, sec. 1, art. 9.

¹¹⁹ Boyd (2011) reports at least 74 countries with a constitutional right to health.

¹²⁰ See Section 4.3.2.

¹²¹ On collective rights related to the environment, see Box 4.1.

to environmental harms,¹²² and can give legal recourse to disadvantaged populations who may be subject to disproportionate pollution and resource extraction. Indigenous communities are often accorded additional protections given their close economic and cultural association with the environment and their traditional disempowerment from legal and governmental systems. *When coupled with procedural rights, such as access to justice and participation in decision making, the right to nondiscrimination is critically important in implementing meaningful environmental rule of law.*

This section reviews the right to nondiscrimination and the rights of marginalized populations and then discusses the importance of human rights and constitutional rights of indigenous peoples relating to the environment.

4.3.1 Nondiscrimination and Protection of Marginalized Populations

The right of nondiscrimination is recognized in the Universal Declaration of Human Rights and across a multitude of treaties and national constitutions and laws, including the International Labor Organization Convention No. 169 Concerning Indigenous and Tribal Peoples in Independent Countries, the International Covenant on Civil and Political Rights, the International Convention on the Elimination of All Forms of Racial Discrimination, the Conventional on the Elimination of all Forms of Discrimination against Women, and the Convention on the Rights of the Child.¹²³ States are obliged to protect human rights "without any discrimination."¹²⁴ The UN Special Rapporteur's Framework Principles on Human Rights and the Environment indicates that States should also avoid indirect discrimination "when facially neutral laws, policies or practices have a disproportionate impact on the exercise of human rights as distinguished by prohibited grounds of discrimination;" and "when measures that adversely affect ecosystems, such as mining and logging concessions, have disproportionately severe effects on communities that rely on the ecosystems."125 The right of nondiscrimination obliges States to equally protect the rights of peoples who rely on their traditional territory for subsistence and cultural identity.¹²⁶

The right of nondiscrimination is central to the equal and equitable implementation and enforcement of environmental law. States may reduce and regulate pollution, but too often polluting industries are concentrated in areas where traditionally disadvantaged populations live, and natural resource extraction often focuses on areas inhabited by indigenous peoples. The environmental justice movement in the United States called attention to the highly disproportionate pollution burden borne by racial minorities and lower-income communities.127 The right to nondiscrimination has been used to seek redress for such situations in the Inter-American Commission on Human Rights¹²⁸ and under U.S. constitutional and statutory nondiscrimination provisions as well.129

127 Cole and Foster 2000.

129 Hill 2015; Sassman 2015.

¹²² Cutter 2012; Bearer 1995; *see also* discussion in Section 6.2 (on gender).

¹²³ *E.g.,* UDHR, art. 2; ICCPR, arts. 2, 26; OHCHR 2015c, paras. 93-102.

¹²⁴ ICCPR, art. 2. The prohibition highlights an illustrative number of explicit prohibitions: "such as race, colour, language, religion, ... or other status." *See also* ibid., art. 26.

¹²⁵ UNGA 2018a, prin. 3, para. 8; *see also* EUFRA 2018, sec. 2.3.

¹²⁶ UNGA 2018a.

¹²⁸ Mossville Environmental Action Now v. United States 2010.

Box 4.2: Right to Life

The right to life is one of the most common environment-related rights enshrined in national constitutions and international law.

As of 2006, 144 of the world's countries recognized the right to life in their constitutions (78 percent).^a Courts in at least 12 countries have interpreted a constitutional right to life to include a right to a healthy environment in which to live that life.^b

Various international conventions and other instruments recognize the right to life, including the Universal Declaration of Human Rights (article 3), International Covenant on Civil and Political Rights (article 6), Convention on Rights of the Child (article 6), African Charter on Human and Peoples' Rights (article 4), American Convention on Human Rights (article 4), Arab Charter on Human Rights (articles 5-8), European Convention for the Protection of Human Rights and Fundamental Freedoms (article 2), and the Aarhus Convention (preamble).^c

A growing number of international and regional bodies have interpreted the right to life to address environmental harms and risks. For example, the European Court of Human Rights has held that the right to life in the European Convention for the Protection of Human Rights and Fundamental Freedoms requires states to put in place a legislative and administrative framework to protect the right against dangerous activities, such as those conducted at chemical factories and waste-collection sites.^d The Inter-American Human Rights Commission has found that protection of the right to life requires the protection of the environment.^e

Under constitutional and international law, then, the overwhelming majority of the judicial decisions holds that the right to life extends beyond the right to not be arbitrarily killed to impose positive obligations on states to protect the quality of life. Indeed the UN Human Rights Committee has stated that the right to life enshrined in the International Covenant on Civil and Political Rights requires governments to take positive action to protect the right.^f

- e. Yanomami v. Brazil, 5 March 1985, IACHR Resolution No. 12/85, Case No. 7615; IACHR 1997, ch VIII.
- f. OHCHR 1982, para. 5; see also OHCHR 2013c, para. 48.

Women and other marginalized and other vulnerable groups are often more dependent on natural resources for subsistence and disproportionately affected by degradation *of resources.* The UN Special Rapporteur for Human Rights and the Environment has drafted Framework Principles on Human Rights and the Environment

a. Law and Versteeg 2011.

b. Boyd 2011.

c. http://www.unece.org/fileadmin/DAM/env/pp/documents/cep43e.pdf, pmbl. (referring to the right to life as a "basic human right" dependent on "adequate protection of the environment").

d. *E.g.*, Öneryıldız v. Turkey, No. 48939/99, 30 November 2004; Budayeva and Others v. Russia, No. 15339/02, 20 March 2008.

suggesting ways to protect vulnerable persons from environmental harm through measures such as identifying vulnerable populations, conducting environmental impact assessments, facilitating access to information and justice (including effective remedies), supporting participation in government decision making, and ensuring that the necessary normative frameworks are in place.¹³⁰

When the environment is degraded, these groups are more vulnerable than groups not subject to discrimination, often because they are tasked with finding and providing natural resources such as water and firewood. The United Nations Convention on the Elimination of All Forms of Discrimination against Women, for example, imposes a duty on States Parties to ensure that women "enjoy adequate living conditions, particularly in relation to ... water supply."¹³¹ Similarly, under the United Nations Convention on the Rights of the Child, States Parties must combat disease and malnutrition "through the provision of adequate nutritious food and clean drinking water."¹³² A dramatic example of natural resource management's impact on marginalized populations can be seen in Case Study 4.5.

The vulnerability of marginalized groups to environmental harms will only grow more acute as climate change affects the availability of water and increases stresses on food and social systems.¹³³ The UN Human Rights Council has adopted several resolutions recognizing the impact climate change will have on several human rights.¹³⁴ Thus, as the climate changes, the right to nondiscrimination will become even more

131 United Nations, Treaty Series, vol. 1249, art. 14(2).

134 Ibid.

important in ensuring environmental rule of law protects the most vulnerable.

4.3.2 Rights of Indigenous Peoples and Persons

The protections afforded by constitutional and human rights law are critical to indigenous peoples and persons, who are often closely tied economically and culturally to the environment and natural resources and who are often disenfranchised from modern political and legal systems.¹³⁵ In addition, natural resource extraction often imposes pollution and livelihood disruption on disempowered local peoples and persons, with most of the benefits of extraction flowing to other persons. In many instances, human right protections may be the only recourse available to these groups and persons.

Indigenous persons often rely directly on the environment for subsistence and livelihood, and many view the environment and natural resources as integral parts of their cultural heritage and identity. When asked what destruction of sacred sites would mean, members of the Xhosa people in South Africa replied: "It means that our culture is dead."¹³⁶

The UN General Assembly has recognized "the interrelationship between the natural environment and its sustainable development and the cultural, social, economic and physical well-being of indigenous people."¹³⁷ International instruments recognize the substantive rights of indigenous groups to culture, religious practices, property (especially traditional lands and resources), and livelihoods. They also recognize

137 See UNGA 1992a, para. 26.1.

¹³⁰ Knox 2012.

¹³² lbid., art. 24(2).

¹³³ UN Office of the High Commissioner for Human Rights and UNEP 2012, 14.

¹³⁵ In this context, "rights of indigenous persons" generally refers to rights held by individuals, while "rights of indigenous peoples" refers to collectively held rights.

¹³⁶ See Millennium Ecosystem Assessment 2004, 38.

Case Study 4.5: Improved Forestry Practices Benefit Women, Widows, and Landless Poor in Niger

Niger is among the poorest nations. It suffers greatly from deforestation, which was exacerbated by colonial land management and tenure policies that discouraged responsible forestry. In 1983, Niger began experimenting with farmer-managed natural regeneration, which encouraged local farmers to regenerate existing trees and stumps to provide firewood and fodder and stabilize soils. When coupled with revised land tenure laws, a new forest code, and sector-specific policies encouraging reforestation, over five million hectares were reforested, which increased agricultural productivity, incomes, and food security.^a

Notably, the reforestation program particularly helped women and other vulnerable groups. Women who lived in villages that adopted farmer-managed natural regeneration spent on average one-half hour collecting firewood while women who lived in villages that did not adopt this practice spent on average 2.5 hours collecting firewood.^b Researchers report that women, widows, and the landless poor saw improved access to land and an increase in income generation opportunities and that women's social status improved due to their involvement in restoring degraded lands.^c

c. Mcgahuey and Winterbottom 2007; Reij 2006; Diarra 2006.

procedural rights, including heightened rights to participate in decisions that affect their lands, environment, and livelihoods. Two of the most important instruments are the UN Declaration on the Rights of Indigenous Peoples and International Labour Organization Convention No. 169 Concerning Indigenous and Tribal Peoples in Independent Countries.¹³⁸ Regional instruments, such as the Inter-American Convention on Human Rights, are also important sources of norms and mechanisms for investigation and enforcement.¹³⁹

Because of the importance of natural resources and the environment to indigenous communities and their

traditional disempowerment under colonial governments, *many countries recognize that indigenous groups have the right to free, prior, and informed consent before development takes place on their traditional lands.* This is reflected in the UN Declaration on the Rights of Indigenous Peoples.¹⁴⁰

International treaties also recognize that indigenous and local communities must give prior informed consent to, be involved in, and benefit from access to traditional knowledge

a. See Stickler 2012.

b. Reij 2006.

¹³⁸ UNGA A/RES/61/295 (2007).

¹³⁹ Shelton 2002.

¹⁴⁰ See Ayana and Wiessner 2007; OHCHR 2013a.

relating to genetic resources.¹⁴¹ Many countries, including Peru¹⁴² and the Philippines,¹⁴³ have legal provisions to protect traditional knowledge. The protection afforded by these provisions can be critical to the livelihoods and survival of indigenous populations, as demonstrated in Case Study 4.6.

Governments' duties to fulfill human rights obligations include ensuring that third parties in their countries or over which they

have jurisdiction respect human rights. For example, many countries recognize customary rights to land, as shown in Figure 4.6. A case from India shows how government's duty to regulate third parties (and particularly businesses) may be applied in the context of land rights. India's Forest Rights Act of 2006 recognizes a range of customary forest rights for tribal peoples and traditional forest dwellers, and it specifies procedures for communities to protect and register their traditional forest rights. Notwithstanding this recognition, a company applied to mine for bauxite in the eastern Indian state of Odisha, in the Niyamgiri hills. After a decision by the Supreme Court of India, the Indian Ministry of Environment and Forests consulted with representatives of the Dongaria and Kutia tribes concerning potential violations of tribal rights in the area. The village representatives decided against the mine development

because it could violate their religious and cultural rights after which the Ministry rejected the mine application.¹⁴⁴

4.4 Rights of Free Association, Free Expression, and Freedom of Assembly

Environmental rule of law is not possible without freedom to associate, express views, and peacefully assemble. These rights allow concerned individuals to work together to advance environmental protection and require governments to allow individuals to speak freely and to protect them from harm or backlash when they defend their environment. Although these rights are recognized by articles 19 and 20 of the Universal Declaration of Human Rights as well as numerous treaties and constitutions,145 they only have meaning when respected and enforced. Unfortunately, many governments have not adequately developed systems for ensuring that those who speak to defend environment-related rights are themselves protected. Between 2002 and 2013, 908 people were killed in 35 countries defending the environment and land, and the pace of killing is increasing.146 In 2017 alone, 197 environmental defenders were murdered.¹⁴⁷ There are many ways that countries, companies, and civil society can stem this bloodshed, protect environmental defenders, and thus enhance environmental rule of law.

¹⁴¹ Convention on Biological Diversity, arts. 8(j), 10(c), 15; Nagoya Protocol, arts. 5, 6, 7; International Treaty on Plant Genetic Resources for Food and Agriculture, art. 9. *See also* UNGA 1992b, prin. 22; UNGA 2007, art. 31. The World Intellectual Property Organization is working toward a formal agreement to protect genetic resources, traditional knowledge, and traditional culture, and is evaluating options for a legal instrument. WIPO 2017.

¹⁴² UNEP 2014, 36 ("Under its law, Peru established its own sui generis regime for the protection of traditional knowledge in Peru.").

¹⁴³ Ibid. ("The Philippines Indigenous People Rights Act 1998 legally recognizes the rights of indigenous peoples to manage their ancestral domains according to their traditions and cultures (customary laws).").

¹⁴⁴ Environmental Rights Database 2015.

¹⁴⁵ UNGA 1948; *see, e.g.*, European Convention for the Protection of Human Rights and Fundamental Freedoms, ETS 5, arts. 10 and 11; Constitution of South Africa, arts. 16 and 18.

¹⁴⁶ Global Witness 2014; OHCHR 2015c, para. 51.

¹⁴⁷ The Guardian 2018.

Case Study 4.6: Land Grabbing and Indigenous Rights

In recent decades, a complex web of factors has led to land rushes and large-scale land acquisitions in Africa, Latin America, and Southeast Asia. In many instances, businesses and state bodies have obtained rights to large tracts of communities' traditional land and converted the land to largescale agribusiness, mining, or timber operations.^a While the land acquisitions are often sanctioned by government licenses and statutes, in some cases they have been held to violate the human rights of the indigenous peoples who had lived on the land-rights that take preeminence over statutory arrangements.



In a 2005 case in the Inter-American Court of Human Rights,^b the Yakye Axa indigenous people in Paraguay had been displaced from their land, and third parties had converted the land to commercial use. The community was destitute and not allowed to practice its traditional subsistence activities. There was little employment. Community members lived in extremely poor housing, lacked access to clean water and sanitation, and suffered high levels of disease. Schooling was inadequate. Although the community had submitted a claim to adjudicate its communal land more than 11 years earlier, the state had not adjudicated the claim.

The Inter-American Court found several violations of the Yakye Axa community's procedural and substantive rights. Recognizing that indigenous peoples have collective land rights,^c the Court relied on both article 21 of the Inter-American Convention and ILO Convention No. 169 in finding that indigenous property rights included a suite of other rights.^d It stated that "protection of the right of indigenous peoples to their ancestral territory is an especially important matter, as its enjoyment involves not only protection of an economic unity but also protection of the human rights of a collectivity whose economic, social and cultural development is based on its relationship with the land."^e Although the right to property could in some cases be balanced against other interests of the state, the Court held that, when making such an evaluation, the State must take into account the impact of loss of traditional territory on the people's rights to cultural identity and survival. The Court ordered the State to demarcate the traditional land, to give it to the community, and to provide the basic necessities of life to the community until it recovered its land.

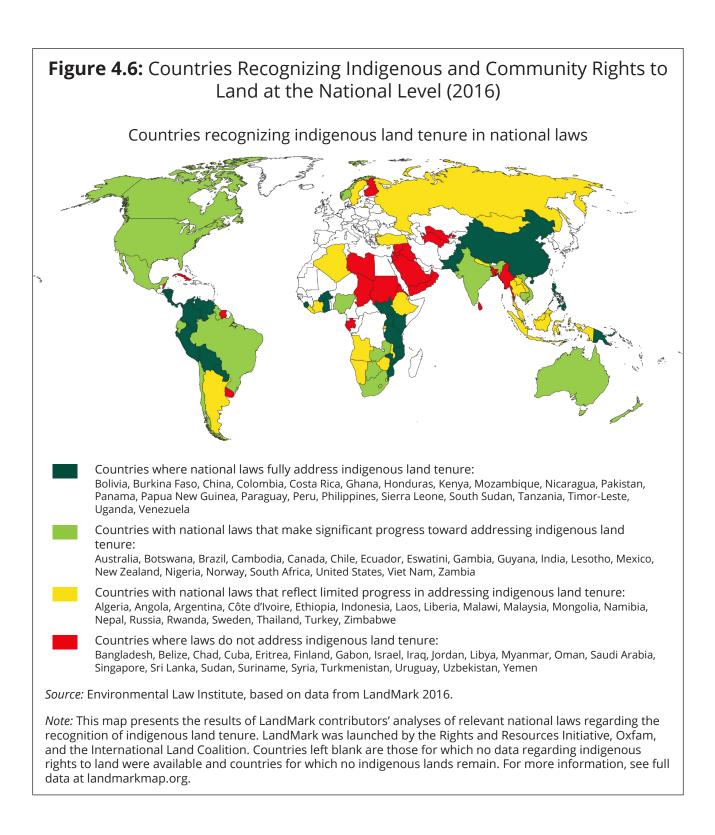
a. Lee 2014.

b. Yakye Axa Indigenous Community v. Paraguay, No. 125 (2005); UNEP 2014, 110-112.

c. UNEP 2014, 107-111: Mayagna (Sumo) Awas Tingni Community v. Nicaragua, No. 79 (2001) ("the close ties of indigenous people with the land must be recognized and understood as the fundamental basis of their cultures, their spiritual life, and their integrity and their economic survival.").

d. Inter-American Convention on Human Rights, art. 21; ILO Convention No. 169, art. 13.

e. ILO Convention No. 169, para. 120(c).



Countries recognizing community land tenure in national laws Countries where national laws fully address community land tenure: Bolivia, Brazil, Burkina Faso, China, Colombia, Ecuador, Ghana, Kenya, Mozambique, Nicaragua, Pakistan, Papua New Guinea, Peru, Romania, Sierra Leone, South Sudan, Tanzania, Timor-Leste, Uganda Countries with national laws that make significant progress toward addressing community land tenure: Austria, Chile, Eswatini, Finland, Gambia, Germany, India, Indonesia, Lesotho, Mexico, Nigeria, Portugal, Slovakia, South Africa, Ukraine, Viet Nam, Zambia Countries with national laws that reflect limited progress in addressing community land tenure: Algeria, Angola, Botswana, Cambodia, Cameroon, Côte d'Ivoire, Cuba, Ethiopia, Guyana, Iraq, Kyrgyzstan, Laos, Liberia, Madagascar, Malawi, Mauritania, Mongolia, Namibia, Nepal, Norway, Republic of Congo, Rwanda, Tajikistan, Thailand, Turkey, Zimbabwe Countries where laws do not address community land tenure: Bangladesh, Belarus, Belize, Bulgaria, Central African Republic, Chad, Eritrea, Gabon, Hungary, Israel, Italy, Jamaica, Jordan, Kazakhstan, Latvia, Libya, Macedonia, Myanmar, Oman, Poland, Saudi Arabia, Spain, Sri Lanka, Sudan, Suriname, Switzerland, Syria, Turkmenistan, Uruguay, Uzbekistan, Yemen Source: ELI, based on data from LandMark 2016. Note: This map presents the results of LandMark contributors' analyses of relevant national laws regarding the recognition of community land tenure. Countries left blank are those for which no data regarding community rights to land were available and countries for which no community lands remain. For more information, see full data at landmarkmap.org.

This section discusses (1) the close links between the substantive rights to free association and expression and those procedural rights that allow persons facing environmental wrongs to seek to avoid harm and seek redress if harmed, and (2) the critical role that the rights to freedom of association

and expression play in supporting and protecting environmental defenders globally.

4. Rights

4.4.1 Procedural Rights Relating to Free Association and Free Expression

The rights to freedom of association and expression are central to environmental rule of law and include the right to participate in government and the right to information. Communities must be able to form associations to address common concerns, express their needs, and participate in government decision making, and have access to courts in order to have meaningful environmental rule of law. The elements necessary to ensure these basic procedural human rights are discussed at length in the Civic Engagement and Justice chapters. The existence of these basic procedural rights is critical, but the rights only create lasting impact when governments embed them in environmental rule of law through statutes, regulations, court procedures, and the provision of resources and skills necessary to make these rights available to all citizens.

A free media is also protected by these constitutional and human rights. The media informs the public and highlights violations of environment-related rights, which supports environmental rule of law by creating an informed, empowered citizenry and civic society.

The freedom of association allows people to come together to protect their common interests. They may do this through community-based organizations, nongovernmental organizations, civil society organizations, and other entities. These organizations are often local, but can also be national and transnational. And they can be very effective at protecting families and communities against illegal seizure of their property, pollution of their water and air, and efforts to suppress dissent. It is perhaps a testament to the effectiveness of these organizations and their advocates, that there has been a backlash against them driven by political and economic elites in many countries.

There is a *disturbing trend of countries to limit the activities of nongovernmental* organizations (see Figure 4.7). In particular, between 1993 and 2012, 39 of the world's 153 low- and middle-income countries enacted laws that restricted the activities of organizations receiving foreign funding.¹⁴⁸ As civil society has used a rights-based approach to call for transparency and accountability in government, some governments have assumed these organizations are politically motivated and are siding with the political opposition.¹⁴⁹ As a result, they have cracked down on funding from foreign sources in an effort to muzzle the calls for rights-based protections. Governments are also restricting the activities of local nongovernmental organizations through new and revised nongovernmental organization registration laws.150

4.4.2 Environmental Defenders

The interconnection between environmental rule of law and the right of free association is particularly critical in the role environmental defenders play in protecting environmentrelated rights and the role rights play in protecting environmental defenders.

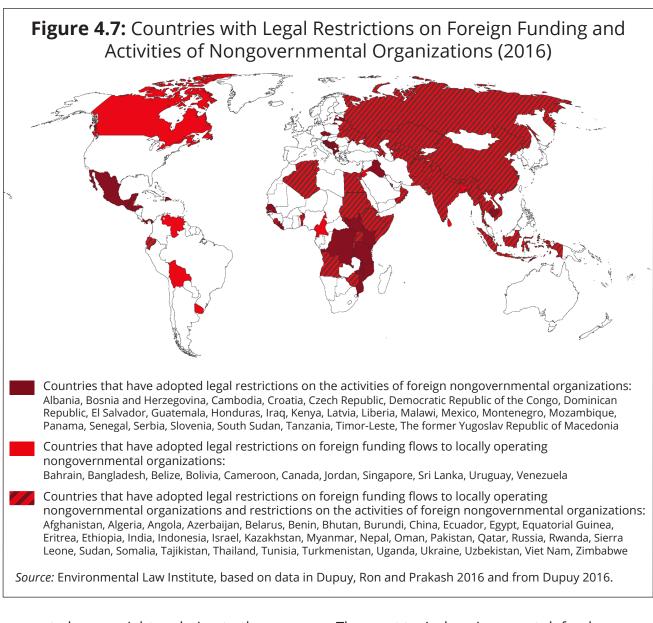
Environmental defenders (sometimes referred to as "environmental human rights defenders") defend communities' substantive environmental, land, water, and subsistence rights—and advocate for sustainable development.¹⁵¹ The UN describes them as "individuals and groups who, in their personal or professional capacity and in a peaceful manner, strive to protect and

¹⁴⁸ Dupuy, Ron, and Prakash 2017.

¹⁴⁹ Ibid.

¹⁵⁰ Unmüßig 2015.

¹⁵¹ UNGA 2016.



promote human rights relating to the environment, including water, air, land, flora and fauna."¹⁵² Environmental defenders appear in many forms: community activists, homemakers, forest rangers, government inspectors, professionals working within corporations to enforce environmental norms, and many others. The most typical environment defender works in the context of large-scale natural resource exploitation, which takes place in or near local and indigenous communities in remote areas. These projects usually affect or otherwise implicate communities' traditional lands, resources, and local ecosystems, which often include biodiversity, water, and forests.¹⁵³ In eight tropical forested countries, 93-99 percent of concessions given

¹⁵² Ibid., 4.

¹⁵³ Ibid., 10.

to mining, logging, agriculture, and oil and gas companies were on land inhabited by indigenous and/or local communities.¹⁵⁴ In Peru, Liberia, and Indonesia, governments have given up to 40, 35, and 30 percent, respectively, of their country's land to private entities for exploitation.¹⁵⁵ As discussed in the Institutions chapter, corruption is frequently present and can be aggravated by large sums of money invested in and flowing from the projects, as well as poor governance and a lack of transparency.¹⁵⁶ According to the Resource Governance Index, more than 80 percent of 58 resource-rich countries do not have satisfactory governance in their extractive sectors.157

Environmental defenders step in to fill this governance gap and promote the environmental rule of law. They help families and communities protect their rights to land, to forests, to minerals, and to other resources. They may lead marches, speak in public meetings, or bring court cases to protect rights guaranteed by constitutions, statutes, and human rights instruments.

Because of their environmental and social advocacy, they are targeted. Environmental defenders have been subject to increasing threats and physical violence. Worldwide, especially in resource-rich countries, murders of defenders have been increasing. During 2015, more than three environmental defenders were killed each week.¹⁵⁸ In the Democratic Republic of the Congo, in Virunga National Park alone, 140 park rangers were killed in two decades.¹⁵⁹ Figures 4.8 and 4.9 show the extent and breadth of the threats facing environmental defenders.

157 OHCHR 2015d, 5-6; <u>http://www.resourcegovernance.</u> <u>org/resource-governance-index</u>. In addition to violence, environmental defenders suffer intimidation, harassment, and criminalization. Environmental defenders also often suffer stigmatization and reputational attacks (for example, through public media). While attacks on environmental defenders are often illegal, anti-protest and anti-terrorism laws have been used to criminalize actions that should be constitutionally protected. The United Nations has recognized the threats to environmental defenders and called for their protection in its resolution on defenders protecting social, economic, and cultural rights.¹⁶⁰ Case Study 4.7 shows the tragic consequences that await environmental defenders when governments do not protect them.

Large-scale natural resource development often leads to conflicts with local and indigenous communities. In response to the projects, environmental defenders frequently organize communities and protests against the projects. In Peru, for instance, the ombudsman reported 211 social conflicts in a single month, February 2015.¹⁶¹ The United Nations has noted that project developers and government entities, in turn, have stigmatized, criticized, criminalized, threatened, and killed defenders.¹⁶² Industries most associated with murders of environmental defenders are the mining and extractive industries (42), agribusiness (20), hydroelectric dams and water rights (15), and logging (15).¹⁶³ In Latin America, government and corporate actors have been specifically identified as involved in the murders.¹⁶⁴ Most murders occur with impunity, with relatively few being independently investigated, let alone prosecuted. Private security companies, which lack public accountability, pose an additional

¹⁵⁴ Rights and Resources Initiative 2015.

¹⁵⁵ OHCHR 2015d, para. 7.

¹⁵⁶ UNGA 2016, 14; OHCHR 2015d, 6.

¹⁵⁸ UNGA 2016, 11.

¹⁵⁹ Virunga National Park 2012.

¹⁶⁰ UNGA 1999, 2011, 2015, 2018b; OHCHR 2008b, 2010, 2011b, 2013b, 2014a, 2014b, 2016, 2018b.

¹⁶¹ Ibid.

¹⁶² UNGA 2016, 11-12; OHCHR 2015d, 14-15.

¹⁶³ UNGA 2016, 9.

¹⁶⁴ Ibid.

risk.¹⁶⁵ The most vulnerable defenders are indigenous people, ethnic and racial minorities, and women, who have relatively little power.¹⁶⁶

These activists can help to defend a variety of substantive environment-related rights under national and international law, including land rights, rights to a clean and healthy environment, rights to subsistence, cultural rights, indigenous rights, and water rights, where these rights are recognized. Typically, rights to land and other resources are a central concern.¹⁶⁷ Article 1 of both international human rights covenants guarantees people the right to selfdetermination and to make decisions about their own natural wealth and resources.¹⁶⁸ Indigenous and certain other communities may have formal rights to a limited area of land, but also frequently have informal traditional rights and unresolved land claims to extensive areas of ancestral land.¹⁶⁹

The absence of clear legal frameworks protecting and governing traditional land rights gives government and private actors opportunities for land grabbing and expropriation and increases the likelihood of social, and even violent, conflict due to uncertainty over land tenure. For example, in Peru petitions by indigenous people to resolve their claims to traditional land have gone unresolved for many years.¹⁷⁰ Yet a recent study found that granting legal title to land in Peru greatly improved forest management. Since the 1970s, 1,200 indigenous communities have been granted title to 11 million hectares of forest. These communities reduced forest clearing by 75 percent and forest destruction by 66 percent between 2002 and 2005.¹⁷¹

Rights to subsistence and to sustainably use the resources of the land are intertwined with land rights. Forest peoples, for example, obtain resources that include food, water, and medicine from forests. When forests or other natural resources are destroyed or polluted as a result of logging, large-scale agriculture (including oil palm), hydroelectric dams, or extraction of nonrenewable resources, the subsistence resources themselves and access to them can also be lost.

Procedural rights—particularly the rights to peaceful assembly, freedom of association, and freedom of expression—are critical to environmental defenders. Environmental defenders are frequently members and representatives of groups that organize in opposition to projects and advocate for their rights. Rights of peaceful assembly, freedom of association, and freedom of expression are exercised in the course of obtaining environmental and project information, organizing community action, and participating in decision making concerning community rights and resources. Associations can help facilitate these actions. When engaging in consultation with government and project proponents, defenders often exercise the rights of peaceful assembly and freedom of association. State restrictions or prohibitions on associations, including restrictions on the ability of groups to receive foreign funds, interfere with these human rights.172

As discussed in the Civic Engagement chapter, the rights to environmental and project information, to participation in decisions, to consultation, and to free, prior, and informed

¹⁶⁵ OHCHR 2015d, 16-17.

¹⁶⁶ UNGA 2016, 10-11, 15.

¹⁶⁷ UNGA 2016, 19; OHCHR 2015d, 7.

¹⁶⁸ International Covenant on Civil and Political Rights, art. 1; International Covenant on Economic, Social, and Cultural Rights, art 1.

¹⁶⁹ *See, e.g.,* Rights and Resources Institute 2015; Landmark 2016.

¹⁷⁰ Forest Peoples Programme 2015a; Forest Peoples Programme 2015b.

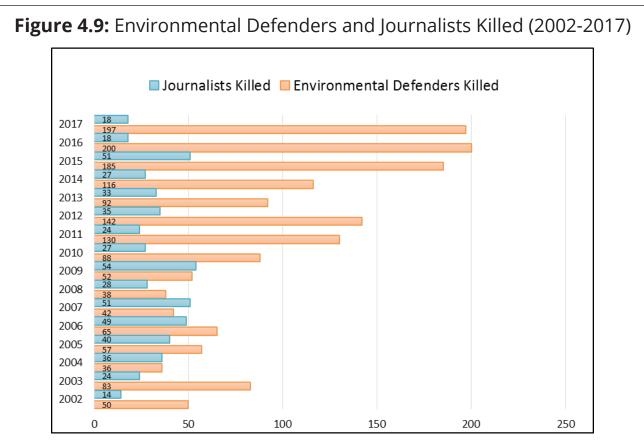
¹⁷¹ Blackman et al. 2017.

¹⁷² OHCHR 2015d, 17-18.

0	s Where Environmental Murdered (2002-2015	
Number of environmental 527 Brazil	defenders murdered in variou 36 Guatemala	s countries (2000-2015) 7 Argentina
129 Honduras	22 Thailand	5 Chad, China, Pakistan,
		Russia
115 Philippines	16 Cambodia, Democratic Republic of the Congo	
		Russia 4 El Salvador, Myanmar,
115 Philippines	Republic of the Congo	Russia 4 El Salvador, Myanmar, Papua New Guinea

consent are central to environmental rule of law. In practice, these rights tend to be integrated into the environmental rule of law of a country through laws and regulations, such as freedom of information statutes and notice-and-comment regulations. At least half of the countries of the world have adopted legislation guaranteeing access to information in general or environmental information in particular.¹⁷³ The Organization of American States and the African Union have each developed model access to public information

¹⁷³ Banisar et al. 2012.



Sources: CPJ 2018, Cox 2018, Global Witness 2014, 2016, 2017, and The Guardian and Global Witness 2017.

laws, for example.¹⁷⁴ But if the laws and regulations do not implement these rights, defenders need to have access to courts to obtain these protections through judicial action using procedural human rights.

Finally, *the rights of redress and accountability are central to protection of environmental defenders.* Frequently, murders of environmental defenders are committed with impunity.¹⁷⁵ Without strong accountability for crimes against environmental defenders, threats and killings will continue. Redress involves prompt and impartial investigation of crimes; arrest and prosecution of perpetrators, including those ultimately responsible; compensation; and enforcement of judgments.¹⁷⁶ Thus, it is critical for strong rule of law that governments ensure swift, effective, and fair functioning of these human rights protections through the police force as well as prosecutorial and judicial services. While only 10 percent of reported crimes committed against environmental activists have been brought to justice, the Inter-American Court of Human Rights has played a role in highlighting the connection between human rights and the environment. In 2009, the Inter-American Court of Human Rights found the state of Honduras guilty of ineffectively investigating the murder of environmental activist Blanca Kawas Fernandez. The court held that the Honduran government violated her right to

¹⁷⁴ See OAS n.d.; African Commission on Human and Peoples' Rights 2012.175 Global Witness 2017.

¹⁷⁶ UNGA 2016, 6.

Case Study 4.7: Berta Caceres

Berta Caceres was a leader of the National Council of Popular and Indigenous Organizations of Honduras, which she cofounded in 1993. She was murdered on March 3, 2016.^a

Honduras has one of the highest rates of killings of environmental defenders in the world—120 activists have been killed there since 2010.^b It also has very low rates of criminal justice enforcement: the vast majority of crimes are never solved.^c As a development strategy, the Honduran government designated almost 30 percent of its land for mining concessions, which in turn created a demand for cheap energy. The government then approved the construction of hundreds of hydroelectric dams to supply the energy.

Two dam companies jointly planned to build the Aqua Zarc Dam across the Gualcarque River. They moved into the area in 2006 without notice, consultation, or free, prior, and informed consent of the local indigenous Lenca community. The Lenca people contacted Caceres for assistance because the dam would have interfered with their rights to safe drinking water and sanitation, an adequate standard of living, including adequate food, and the enjoyment of the highest attainable standard of health, and to sustainably use their land for their livelihoods. Caceres led a campaign against the dam, which was ignored by national and local officials. In 2013, she organized a road blockage that lasted for over a year and was effective in stopping construction. In late 2013, one of the dam companies and the International Finance Corporation withdrew from the project. In 2015, she was awarded the Goldman Prize for her advocacy.^d

Although Caceres received dozens of death threats and the Inter-American Commission on Human Rights granted her emergency protection measures, the Honduran government did not implement them.^e She was murdered by gunmen in her home. After her murder, several of her colleagues were also killed, and the Dutch development bank FMO and FinnFund stopped supporting the project. In response to the crime, the Honduran government arrested eight individuals, including two employees of the dam company and two members of the state security forces. After international criticism of the Honduran investigation, a group of five international experts launched an independent inquiry into the murder and issued a report concluding that high-level dam company officials were involved in planning Caceres' murder.^f

a. The Goldman Environmental Prize 2015.

b. Lakhani 2016.

c. OSAC 2016.

d. The Goldman Environmental Prize 2015.

e. OAS 2016.

f. GAIPE 2017.

life and stressed the importance of protecting human rights in specifically relating to environmental human rights.¹⁷⁷

Environmental defenders are at great risk of physical harm unless governments not only respect defenders' substantive and procedural rights but actively protect them by ensuring their safety in the face of physical threats. Common approaches to protecting environmental defenders include whistleblower laws and laws preventing retaliation (including for so-called Strategic Litigation Against Potential Plaintiffs or "SLAPP Suits").

Some environmental defenders are employees who expose wrongdoing of companies or governments by which they are employed. These whistleblowers often suffer attacks for their efforts. As such, whistleblower laws are critical to protecting environmental defenders. These laws provide protection from retribution and/ or rewards to government employees and/ or other persons who report violations of the law. These protections allow those who learn of malfeasance to seek not just legal protection but also financial rewards for bringing the illegal activity to the attention of the authorities. Typically, whistleblowers receive a percentage of the penalty assessed, in recognition of the benefit provided to the government, as well as their personal and professional risks incurred in doing so. In the United States, for example, while the Whistleblower Act of 1989 provides general protection to government employees who report wrongdoing, more than 25 lawsmostly related to natural resourceshave provisions explicitly protecting whistleblowers. One of those laws, the 1978 Fish and Wildlife Improvement Act, as amended, provides whistleblower rewards

Although many countries worldwide have adopted at least some whistleblower laws, studies by the G20 and others report that most countries do not provide full legal protection and that many laws are clearly inadequate.¹⁸⁰ The Organisation for Economic Co-operation and Development,¹⁸¹ Transparency International,¹⁸² and the Government Accountability Project¹⁸³ have suggested that six essential elements of adequate legislation include:

- protection of employees from discriminatory or disciplinary action, if they disclose in good faith and on reasonable grounds;
- a clearly defined scope of protected disclosures and identification of the types of persons afforded protection;
- robust and comprehensive protection of whistleblowers' identity, safety, and employment;
- clearly defined procedures and prescribed channels for facilitating the reporting of suspect acts, including the provision of protective and easily accessible whistleblowing channels;

for more than 40 wildlife laws.¹⁷⁸ As of 2017, 32 countries had adopted dedicated laws to protect whistleblowers, and 27 more countries had adopted legal provisions in various laws to protect whistleblowers (see Figures 4.10 and 4.11).¹⁷⁹

^{178 16} U.S.C. sec. 7421 (k).

¹⁷⁹ Many countries that adopted dedicated laws to protect whistleblowers also adopted legal provisions in environmental, securities, workplace, and other laws to protect whistleblowers. In addition to the 59 countries identified in Figure 4.1, Kosovo adopted a dedicated whistleblower law in 2011.

¹⁸⁰ OECD 2011-2012; Wolfe et al. 2014.

¹⁸¹ OECD 2011-2012; Wolfe et al. 2014.

¹⁸² Transparency International 2013.

¹⁸³ Devine 2016.

¹⁷⁷ UNEP 2014.

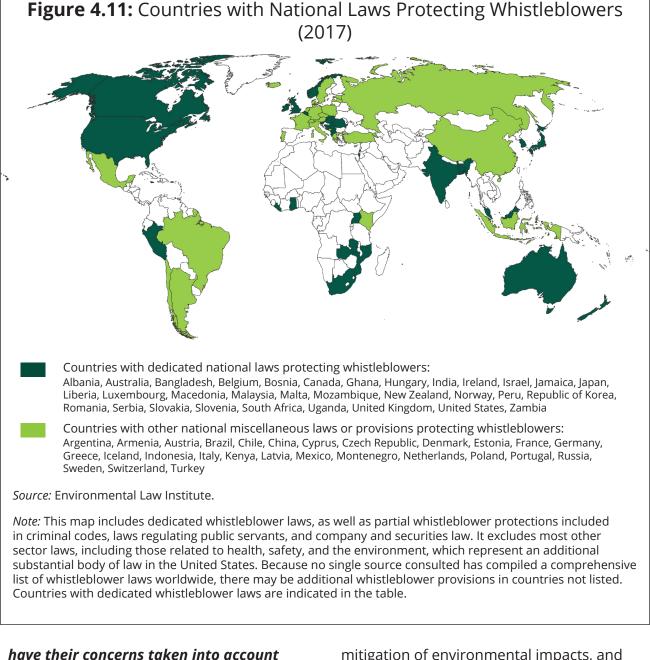
- 5. effective protection mechanisms, including use of a special accountable body with the power to receive and investigate complaints; and
- 6. awareness-raising, communication, training, and periodic evaluation of the effectiveness of the protection framework.¹⁸⁴

There are also practical and political elements of protecting whistleblowers. For whistleblower protection legislation to be effective, corrupt institutions and officials must not interfere with its implementation. Strong penalties for official abuse of power can help deter such behavior. Officials who immediately publicize threats against environmental defenders, especially before the conflict escalates (and defenders are killed), can help mobilize government and community resources to protect defenders. They can also prioritize prosecution of violators of environmental defenders' rights in order to show firm rule of law and deter further violations. The provision of extra damages to victims of environment-related crimes and their families is also a strong deterrent. And creation of an ombudsman to act as a trusted focal point for receiving complaints and reporting on threats and violations of constitutional and human rights can help environmental defenders feel they have an ally in government to whom they can go when needed.

The protection of environmental defenders is not just a matter for government, however. Corporations can prioritize early and frequent engagement with communities affected by their projects and operations to ensure that all voices are heard before a project takes form. *Many conflicts can be defused by according those affected by environmental issues the opportunity to be heard and to*

¹⁸⁴ Wolfe et al. 2014; OECD 2011-2012; Transparency International 2013.





have their concerns taken into account during the project design phase, rather than being presented a fully-formed or almostcomplete project into which they can have little meaningful input. Common approaches for engaging affected communities and reducing conflict around resource-related projects include good international practices regarding free, prior, and informed consent, mitigation of environmental impacts, and consultation with affected populations. Companies can also join multi-stakeholder and industry-specific initiatives aimed at strengthening environmental rule of law in certain industries, such as the Extractive Industries Transparency Initiative.¹⁸⁵ Financial

¹⁸⁵ The Extractive Industries Transparency Initiative n.d.

institutions, both domestic and international, can ensure that environmental and social safeguards are in place and met as a condition for receiving funding by following internationally accepted norms such as the Equator Principles,¹⁸⁶ and businesses can follow the Guiding Principles on Business and Human Rights.¹⁸⁷ Such practices are discussed in detail in the Civic Engagement chapter.

Civil society plays a key role in protecting environmental defenders. Civil society is closely involved in helping to formulate many of the multi-stakeholder and voluntary initiatives referenced above. In addition, several organizations have created awards to recognize and publicize the work of environmental defenders, including the Goldman Prize and the Right Livelihood Awards.¹⁸⁸ Organizations also provide resources and support to defenders, through efforts such as Environmental-Right.Org, a portal for environmental defenders, and organizations like the Environmental Law Alliance Worldwide, which trains and supports environmental lawyers and defenders from around the world.189

4.5 Opportunities and Recommendations

Environmental rights and duties have taken root around the globe through national constitutions and statutes, international and regional human rights instruments, and other international and regional legal instruments. While environmental law typically focuses on environmental duties—including, for example, the duty of regulated actors to control and report their air pollution, water pollution, solid waste, and toxic waste; and the duty of project proponents and the government to undertake environmental impact assessments for proposed projects that could harm the environment—historically, there has not been a commensurate emphasis on environmentrelated rights.

There are many sources of relevant rights, including environmental statutes, constitutions, and regional and international human rights instruments, among others. Countries have adopted a wide variety of approaches for framing environmentrelated rights in their source and scope. A substantial number of countries and regions have adopted constitutional and human rights to emphasize the fundamental importance of public health and the environment. That said, even countries not emphasizing a rights-based approach may utilize important legal approaches to protect nature, including environmental impact assessment and efforts to ensure that decisions on development projects include consideration of the value of ecological services that the projects can impair.

Constitutional and human rights are supported and made possible by a healthy environment that enables people to realize their rights to water, health, and life, among others. Rights provide an independent basis for environmental protection using a rights-based approach. Through their interdependence, rights-based approaches and environmental rule of law can create a virtuous cycle where they reinforce each other and support general rule of law and sustainable development. Similarly, failure to respect rights can weaken the environmental rule of law and undermine environmental protection, social justice, and economic progress.

A rights-based approach can strengthen environmental rule of law by elevating the importance of environmental protections

¹⁸⁶ The Equator Principles 2013.

¹⁸⁷ OHCHR 2011a.

¹⁸⁸ The Goldman Environmental Prize 2015; The Right Livelihood Award, n.d.

and ensuring that those protections are realized equally and equitably. Framing environmental protection in terms of constitutional or human rights can help to broaden understanding of the importance of the environment and the key role it plays in supporting society and the economy.

Rights-based approaches are still nascent in many countries, and *the extent and* nature of rights-based approaches continue to evolve. Countries could benefit from exchanging experiences and good practices on operationalizing environment-related rights, as most countries have recognized the rights in their constitutions, but only relatively few have undertaken substantial measures to give them full force through the country's laws, regulations, institutions, and practices. Moreover, research on the effectiveness of specific rights-based approaches (such as constitutional rights-based litigation) is limited.¹⁹⁰ Further research and knowledge on the effectiveness of specific rights-based approaches is needed to better inform government and civil society action.

Enshrining a right to a healthy environment in national and subnational constitutions signals to all parties that **environmental protection is commensurate with other rights and responsibilities** contained in the constitutions. Recognition of a constitutional right to a healthy environment can help companies and citizens alike come to see environmental protection as essential to a free and healthy society. The right of nondiscrimination cuts across many aspects of environmental rule of law. The critical need for protection of gender and indigenous rights has been much more widely understood, but *a significant implementation* gap remains in securing nondiscrimination with respect to access to and protection of environment-related rights of disadvantaged *groups.* One remedy is to consider the rights of members of marginalized populations in each government decision to act or not to act in order to help identify potential consequences for marginalized populations. By definition, marginalized populations rarely have access to and voice in government processes. Further, government may not be aware of the differential impacts that its action or inaction may have on marginalized populations. Therefore, by establishing procedures for assessing what impacts its actions might have on marginalized populations, a government can help bring to light and avoid unintended consequences.

Environmental defenders remain highly vulnerable and under attack across the globe. It is incumbent upon all governments to prioritize protection of environmental defenders from harassment and attack and to bring those who harm or threated defenders to justice swiftly and definitively. Tolerance of intimidation of environmental defenders undermines basic human rights and environmental rule of law. One measure to improve protection of environmental defenders could be an annual report to the United Nations of efforts by each country to investigate and prosecute crimes against environmental defenders and the results of the efforts. The report could also highlight measures to try to prevent attacks on environmental defenders. Such a report could help to focus government attention and foster political will to protect environmental defenders.

¹⁹⁰ Conducting a global survey of the impact of constitutional provisions that guarantee environmental rights,

David Boyd (2012a) concluded that such provisions exert extensive influence on national legislation; are enforceable in most nations that have the provisions; increase public access to courts; and exist in nations with better national environmental performance.

Environmental Rule of Law

4. Rights

Implementing environmental rule of law to ensure meaningful participation in government decision making and development projects can help avert controversy and opposition to development, reducing delays and associated costs. **By** *implementing good practices regarding free, prior, and informed consent as well as access to information and consultation with affected populations, many conflicts can be avoided before they have a chance to arise and fester.*

The provision of rights in law has little meaning if citizens are unaware of them or cannot exercise them. **Governments should publicize the rights available to the public and ensure a robust, free civil society able to help citizens actuate these rights.** Nongovernmental organizations and a free press are key actors in helping citizens learn about their rights, and government should consider them allies, not enemies, in ensuring the public knows about its rights regarding development projects, pollution, or other environmental harms.

Creating ombudsman and whistleblower protections can provide safe, recognized channels for reporting environmental infractions while reducing potential backlash from reporting. Provision of rewards for whistleblowing is an important element in combatting corruption and malfeasance that has worked well in many countries.

Countries are exploring how rights-based approaches can support the environmental rule of law, and how environmental rule of law can in turn support the realization of constitutional and human rights at the international, regional, national, and subnational levels. There are many opportunities to strengthen environmental rule of law by integrating a right-based approach into environmental protection. This in turn supports human rights themselves so that communities and societies can thrive in a socially just atmosphere based upon a healthy environment and sustainable natural resources.



5. Justice

A fair, transparent justice system that efficiently resolves natural resource disputes and enforces environmental law is a critical element in establishing lasting environmental rule of law. The types of adjudication discussed in this chapter include (1) private party versus private party disputes (for example, a community opposing a company's actions); (2) private parties petitioning or suing the government (for example, a company challenging a permit decision); and (3) the government suing or penalizing a private party (for example, an agency enforcing the law against a violator). The ability to resolve such actions quickly, affordably, peacefully, and effectively are key elements of successful implementation of environmental law. Many countries are finding innovative ways to ensure fair, transparent, and reliable environmental adjudication, as discussed below.

Dispute resolution and enforcement in environmental matters often involve a complex intersection of social, economic, and political interests. Compared to dispute resolution in other areas, environmental matters can be particularly difficult because they often involve natural resources that are the basis for economic development and implicate traditionally disadvantaged populations. It can be difficult for such communities to gain access to dispute resolution mechanisms and government enforcement proceedings, though, and there are many barriers to protecting resources, which cannot defend themselves.

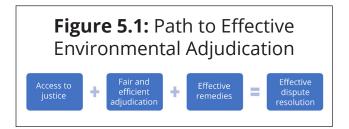
This chapter reviews "justice" broadly and discusses disputes over resources, the impact of resource use and pollution on communities and the environment, and government enforcement of environmental laws. Often, the terms "dispute resolution" and "adjudication" are used in their broadest senses to refer to all three types of situations where questions of justice for environmental harms and violations are considered. A related term is "environmental justice," which has many different meanings depending on the context and country: sometimes, it refers to differential impacts of pollution on disadvantaged communities; sometimes, it refers more broadly to justice in environmental matters.

There are many implementation challenges to establishing justice systems for environmental issues, including lack of access to justice, a lack of skilled judges and advocates, and scarce government resources, *among others.* Disputes that are not resolved fairly and transparently often contribute to environmental harm, lasting conflict, and even social disintegration. Between 40 and 60 percent of civil wars over the past 60 years have been associated with natural resources.¹ And all but 3 of the 34 civil wars in Africa related to disputes over land.² Just as poorly handled disputes can fuel conflict, environmental disputes that are handled well can help establish the groundwork for meaningful dispute resolution in a country and become a basis for broader rule of law.

The benefits of a robust environmental justice system go far beyond the environment by defusing conflict, increasing social cohesion, and broadening social inclusion. For example, in a landmark decision in 2013, the Supreme Court of India peacefully resolved an increasingly acrimonious dispute between indigenous communities and the government over a proposed 670-hectare bauxite mine planned to be developed on lands considered sacred by Dongria Kondh indigenous communities.³ There had been much latent violence, with threats to harm members of the communities who were protesting and campaigning against the environmental clearance and mining operation. The Supreme Court ruled that the rights of the indigenous communities must be taken into account in deciding whether to proceed with the mining project. All 12 tribal villages voted against the

project, and, in January 2014, the Ministry for Environment and Forests decided to prevent the mining project from proceeding. By upholding the right of free, prior, and informed consent (a right under international law that is discussed at length in Section 4.3.2) on matters related to natural resource extraction in tribal regions of India, the Supreme Court both resolved the dispute at hand and sought to prevent future disputes from emerging.⁴

After a brief overview of the core concepts, benefits, and implementation challenges (Section 5.1), this chapter discusses the path to effective environmental adjudication, illustrated in Figure 5.1.



First, parties must be able to avail themselves of the law and its protections and sanctions (Section 5.2). Next, the dispute resolution or enforcement process itself needs to be fair, capable, innovative, and transparent, as well as marked by trustworthiness and integrity (Section 5.3). Finally, remedies available through the process must address the harms and grievances raised (Section 5.4). The chapter concludes with a consideration of key opportunities for improving justice in environmental cases. Perhaps the most succinct message regarding justice in environmental matters is that the goal is a *"just, quick, and cheap resolution of the real"* issues in the proceedings."5

¹ UNEP 2009.

² Fearon and Laitin, 2003, 77.

³ Orissa Mining Corporation v. Union of India (2013) 6 SCR 881, April 18 (India Supreme Court).

⁴ For more information on mining in Orissa and resistance by indigenous people, see Padel and Das 2006.

^{5 2005} New South Wales (Australia) Civil Procedure Act, sec. 56.

5.1 Introduction

This section reviews the core concepts of access to justice and of environmental adjudication. It then considers the benefits of and obstacles to achieving justice in environmental cases.

5.1.1 Access to Justice

Courts and tribunals are of little use if they are not readily available to all aggrieved parties.⁶ As shown in Figure 5.2, there are four common barriers to accessibility: legal standing, financial resources, geographic remoteness, and lack of specialized knowledge.

Environmental matters present special challenges because legal rules may make it difficult to seek to protect resources, places, and communities in court. In order to file a case in court, the party must meet the jurisdiction's requirements of "locus standi" or "standing," which means having sufficient connection to the dispute to bring or participate in the court case. Standing requirements may range from the most restrictive (requiring the parties seeking to bring a case to show that they have already suffered actual harm from the actions at issue), to the most open (allowing any party to bring a case on behalf of the public good, the environment, or future generations).⁷ A narrow interpretation of standing focusing on individualized economic harm can prevent communities from going to court to protect shared resources, such as a national park, a forest, or a scenic view because no one can demonstrate a sufficiently close connection to the resource or the harm has yet to

6 As a general matter, courts are within the judicial branch of government, and tribunals are within the administrative branch. These terms are often used interchangeably, however.

happen. This can also make it impossible to pursue suits seeking to prevent harm, such as stopping a development project that violates the law, or seeking to address harm to persons other than the person suing, such as a nongovernmental organization suing on behalf of a community.⁸



Many courts and legislatures have established broad or even universal standing to facilitate access to courts and tribunals for environmental cases. India and the Philippines, for example, both allow broad standing for individuals and organizations in environmental cases extending even so far as to unborn citizens in the Philippines.⁹ The

⁷ See generally Dorn 2010; Martin 2008.

⁸ *See, e.g.,* Lujan v. Defenders of Wildlife, 504 U.S. 555 (1992).

⁹ Gill 2012; Bonine 2008, 17; Republic of the Philippines Supreme Court, Rules of Procedure for Environmental Cases, A.M. No. 09-6-8-SC (2010): 11-12 (Rule 2, Section 5).

Supreme Court of the Philippines recognizes the injury element of standing, but in the *Oposa* case,¹⁰ the Court gave it a more liberal interpretation with regard to environmental claims. The Court held that representatives suing on behalf of succeeding generations had standing based on an "intergenerational responsibility insofar as the right to a balanced and healthful ecology is concerned." The doctrine of standing in Philippine jurisprudence, although groundbreaking, was the catalyst of a greater concept: public participation as one aspect of justice in environmental enforcement. If the people's rights related to the environment are to have effect, they must be enforceable and the legal system must give the people an avenue to protect these rights. And some countries in Latin America recognize very broad notions of standing, such as Costa Rica, which allows individuals and even minors to submit writs of *amparo* to protect constitutional rights.¹¹

Indeed, as of 2017, more than 130 countries have provided that citizens may bring suit based on their environmental legislation or constitutions, and the vast majority of these recognize a broad range of protected interests beyond economic interests (including recreation, research, and cultural interests).¹² Figure 5.3 shows the growth in countries providing for citizen suits in environmental matters. Many countries and sub-national jurisdictions allow any citizen to bring an environmental claim in the public interest; allow cases that address potential future harm; and allow persons to sue on behalf of communities or places with which they have no direct economic or other connection. This approach has also spread to enforcing environmental laws—some countries allow citizens to bring suit against private parties

for noncompliance with environmental laws in so-called "citizen suits," especially if the government fails to act.¹³

Financial requirements can also impede access to justice. Courts and tribunals can impose high court costs to bring and pursue a case, and attorneys' and experts' fees can be prohibitively expensive. In civil law countries, these can deter bringing a case. In common law countries, procedural requirements can be problematic, for example requiring a party who seeks a court order temporarily stopping development while its legality is being argued in court to post a bond. Solutions include lowering bonding requirements in public interest cases and encouraging free representation for those without adequate resources by skilled legal counsel and legal clinics using students supervised by qualified professionals.

Many courts and tribunals are in the capital city or regional capitals. Getting to court from remote locations poses a significant hurdle due to the time, cost, and distance involved. To remedy this, **some courts hold sessions** *in remote locations, use technology to allow* virtual hearings in lieu of in-person hearings, and collaborate with nearby jurisdictions to provide one judge to serve several *jurisdictions.* For example, some countries send one judge to a remote location to hear cases when the remote location is more accessible than the capital where the court sits. Specialized buses are used in Guatemala and the Philippines to hear cases in remote regions, and the Philippines Supreme Court sent one such bus to the Visayas region to hear and mediate environmental cases.¹⁴ Similarly, the Brazilian State of Amazonas' Court of Environment and Agrarian Issues sends judges to locations without traditional courtrooms to hear cases and, as discussed

¹⁰ G.R. No. 101083 July 30, 1993. <u>http://www.lawphil.</u> net/judjuris/juri1993/jul1993/gr_101083_1993.html.

¹¹ Saulino and Torres Asencio, 176.

¹² Bonine 2008.

¹³ May 2003; Nemesio 2014.

¹⁴ Pendergrass 2012, 249.



below, often sends judges on visits to the site of the dispute.

Environmental matters often involve highly technical issues that involve, for example,

scientific uncertainty, specialized knowledge about natural resources, and engineering questions. Proponents of a project often have this specialized knowledge and may have more knowledge than any other party,

5. Justice

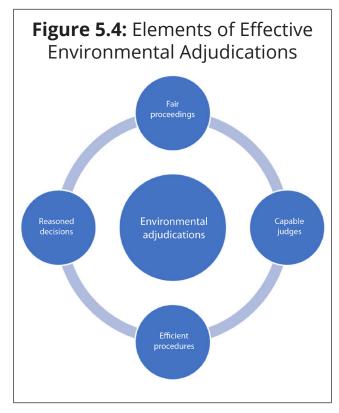
including the government. As a result, *it is critical that specialized knowledge be made available to all parties in an environmental matter* so that the decisions made are well informed and not subject to surprises when information is learned at a later date. And, as discussed below, it is critical that the judges have a sufficient education and resources to allow them to hear cases involving specialized knowledge.

Given the unique technical, legal, and political aspects of environmental cases, many countries have established specialized environmental courts and tribunals to hear environmental disputes.¹⁵ These courts and tribunals may have their own rules regarding standing, costs, and geographic accessibility that are tailored to the needs of environmental matters. They often also have relaxed procedural requirements and provide technical and legal assistance to the parties, which enhance access to justice. These specialized courts are discussed further in Section 5.3.3.

5.1.2 Effective Environmental Adjudication

The way that cases are managed will determine whether parties have confidence in the environmental rule of law.

If adjudications are marked by a real or perceived lack of independence on the part of the judiciary, unskilled judges, or extremely slow processes, then the chances are high for mistrust and disillusionment with the dispute resolution and enforcement system. Figure 5.4 highlights those elements of environmental adjudication that are central to delivering justice.



The proceedings of a court or tribunal must be perceived as fair in order to be considered legitimate by users of the judicial system. Parties should be able to present their evidence and be heard fully using procedures that are clear and balanced. Justice may be undermined and the legitimacy (and thus effectiveness) of the court harmed when cases go unheard by a judge for extended periods of time or take a long time to reach a decision after being heard. An increasing number of countries direct environmental litigants to alternative dispute resolution before considering a case.¹⁶ Alternative dispute resolution can speed resolution of a matter at lower cost. Although costs can vary widely

¹⁵ At least 50 countries have national environmental courts and tribunals (see Figure 5.10), with approximately 140 countries relying on their national courts of general jurisdiction to hear environmental cases. Some federal countries also have environmental courts or tribunals at the provincial or subnational level.

¹⁶ Ansari, Bin Ahmad, and Omoola 2017.

depending on the type of alternative dispute resolution used, many surveys find these methods can cost approximately half as much as litigation and take much less time.¹⁷ It can also look at the broader context—beyond the specific legal issues being contested that a court can address—and attempt to resolve broader conflicts underlying an environmental dispute.¹⁸ A survey in Serbia found that 93 percent of participants in mediation said this process increased their confidence in the legal system.¹⁹ Care must be taken, however, to ensure that alternative methods are conducted professionally and in a manner to protect weaker parties.

Corruption and lack of judicial independence are a threat to all judicial systems. Strong judicial ethics may be maintained by ensuring adequate pay, independence of the judiciary, a strong prohibition on ex parte communication (and disclosure on the record of any such communication), and vibrant oversight mechanisms to investigate and resolve claims of malfeasance, as discussed in Chapter 2.

Judges and lawyers may have been educated before environmental law became a major area of law. Thus, educating lawyers about environmental law and ensuring broad understanding of environmental law within the judiciary helps ensure that judges are ready and willing to hear environmental cases. For example, in Uganda, training all the judges and magistrates on the basics of environmental law empowered the judiciary to hear and decide cases that had previously been lagging, as discussed in Case Study 2.6. Many organizations—including UN Environment and the Environmental Law Institute—have long-standing programs to support judicial education on environmental law and international judicial cooperation. Because environmental matters can be so complex and technical in nature, many countries give some judges specialized training to hear these cases or create specialized courts and tribunals for environmental cases.

Decisions reached in an environmental matter are most effective when they are reasoned, documented, and publicly available. Documenting a decision allows the parties and the public to examine the reasoning applied, which helps those not involved in the case better understand the law and how courts and tribunals apply the law, even if these decisions do not act as precedent for other cases. Unfortunately, most countries leave it to the discretion of the courts whether to publish their decisions, although legislation in Hungary, Honduras, and Mexico, among other countries, requires courts to publish their decisions.²⁰ Some courts do not release their decisions or charge high fees for copies, which limits broader understanding of environmental law and its application in the real-world context. Even if decisions are delivered orally, providing transcripts at low or no cost increases transparency, access to information, and public awareness.

5.1.3 Benefits

Fair and transparent adjudication provides environmental, social, and economic benefits. It is the primary method for ensuring implementation of environmental law and achievement of the environmental results promised by the law. By identifying

¹⁷ Love 2011, 2.

¹⁸ McGregor 2015; Menkel-Meadow 2002; Cappelletti 1993. The ability of alternative dispute resolution to address the broader context depends on the nature of the specific mechanism. For example, arbitral tribunals generally address only those issues that the parties agree to have the tribunal address.

¹⁹ IFC 2010, 32.

²⁰ Navratil 2013, 190.

5. Justice

and addressing social conflicts that may underlie environmental disputes, effective environmental adjudication may increase social cohesion and promote sustainable development. It also provides a peaceful means for resolving disputes, which is particularly important for countries emerging from conflict where large segments of the population may have become accustomed to resolving disputes through violence.

Environmental enforcement and dispute resolution seek to provide accountability and consistency in environmental law. Governments usually rely on enforcement after harm has occurred as the primary method to ensure compliance with the law. Parties that are aggrieved by environmental pollution or resource use can peacefully hold government, companies, and others accountable for environmental harms they have suffered. In a number of instances, governments, citizens, and nongovernmental organizations can seek to prevent environmental harm before it happens. For example, in the landmark U.S. case *Tennessee Valley Authority (TVA) v. Hill*, the U.S. Supreme Court held that the Endangered Species Act prohibited the completion of the Tellico Dam, where operation of the dam would jeopardize the existence of the snail darter, an endangered species, even though the dam was virtually completed.²¹ A well-functioning legal system provides accountability and relief for both actual and pending environmental harms. This creates consistency and predictability and establishes a strong deterrent effect in discouraging future harmful behavior.²²

Many environmental issues arise from externalities, where use of the common air or water resources to dispose of emissions is free to the emitter but imposes costs, such as health effects or diminished property values, on third parties. Environmental adjudication offers corrective social action to account for such externalities. Disadvantaged parties often have no other recourse than the remedies offered by the law. As such, adjudication is a key ingredient in avoiding civil strife over pollution and resource *management*. Disputes over resources that go unaddressed can turn violent. This has happened at the local level and occasionally at the national level, as illustrated by disputes over water privatization and pricing in Cochabamba, Bolivia, disputes between pastoral and agrarian communities over water and land rights in Afghanistan and Kenya, and disputes over the environmental effects of mining in Bougainville, Papua New Guinea.²³ A robust system of accountability that is trusted by all parties provides a peaceful outlet for resolving conflict.

Ensuring that those responsible for violations of environmental law are brought to justice also deters noncompliance with environmental laws and builds respect for law. A strong and independent judicial system where environmental law can be enforced is essential to creating a culture of compliance, preventing environmental harm before it occurs rather than only addressing it after the fact. In addition, robust judicial systems that are accessible and transparent, as discussed below, provide justice for all people, regardless of their economic or social status.

5.1.4 Implementation Challenges

There are three predominant challenges to providing adequate environmental adjudication across the globe: access to justice, human capacity, and government material resources.

²¹ TVA v Hill, 98 S.Ct. 2279 (1978).

²² For statistics on the deterrent effect, see Section 2.6.

²³ Bruch, Muffett, and Nichols 2016.

High court fees, complex procedures, geographically distant courts, and legal bars to bringing cases all pose significant barriers

to achieving justice. Many communities and individuals that are aggrieved by environmental harms lack the resources to bring a court case. The legal principle of standing, which governs who has the right to appear in court to challenge certain actions (whether it be the issuance of a permit, illegal dumping of hazardous waste, or poaching), can greatly narrow who can seek redress for environmental harms, thereby denying access to justice. Even if the dispute resolution system has been well designed, it is of little use if access to it is not timely, inexpensive, and fair.

The capacity of lawyers and technical experts to bring and of judges to hear and consider environmental cases remains a

significant concern. Environmental cases often have many law and science linkages, and the frequency with which these linkages arise grows as our technologies and scientific understanding grow. Many countries do not have a sufficient cadre of environmental law and science experts who can pursue the legally and scientifically complex aspects of environmental cases. A 2010 symposium of Asian judges identified capacity building, including on environmental litigation techniques and dispute resolution, as a key need for implementing environmental law.²⁴

A lack of government material resources devoted to promoting transparency, as well as the slow pace of some court proceedings are also significant implementation

challenges. Decisions of courts and tribunals need to be made widely publicly available to educate stakeholders and to have a deterrent effect. The public must be aware of the availability of environmental dispute resolution to take advantage of it. And cases, The benefits of and challenges to improving environmental adjudication are summarized in Figure 5.5.

The rest of this chapter reviews three main areas in which improvements can be made to ensure justice in environmental enforcement and environmental dispute resolution: by ensuring access to justice; by implementing effective adjudication; and by providing effective remedies.

Figure 5.5: Benefits of and Challenges to Improving Environmental Adjudication

Benefits

Realization of environment-related rights

Reduction in harm from pollution and resource extraction

Increased accountability and consistency in the application of environmental law

Avoidance of civil strife over natural resources and pollution

Enhanced culture of compliance

Challenges

Inaccessibility of dispute resolution due to financial, geographic, and jurisdictional barriers

Lack of capacity and accessibility of judges, lawyers, and technical experts

Lack of government material resources to invest in rule of law infrastructure

once filed, need to move quickly to resolution or else time will weaken the effect of the ultimate decision. Matters that languish for many years create mistrust of the system and cause parties to look elsewhere for relief.

²⁴ Asian Development Bank 2011.

5. Justice

5.2 Access to Justice

Justice is predicated on having access to those fora that hear environmental disputes and enforce environmental laws.

"Access" means that those seeking relief (1) have knowledge of, or can easily find, the mechanisms available to them; (2) can utilize these mechanisms without undue delay or prohibitive cost; and (3) can access skilled technical assistance necessary to pursue their claims. Often, there are barriers to access in each of these areas, thereby undermining the delivery of justice. These challenges, and how countries are addressing these challenges, are considered in turn.

As an initial matter, because parties cannot seek redress and representation unless they know they are entitled to it, *it is critical that all citizens know their rights and how to protect them*. Publicizing the existence of environment-related rights and availability of institutions is the first step. In addition, developing environmental nongovernmental organizations, legal clinics and outreach programs from universities, and community organizations (such as the one highlighted in Case Study 5.2) support advocates for the public interest to fill this educational role.

5.2.1 Jurisdictional Accessibility

In order to bring or participate in a court proceeding, a party must satisfy certain requirements, known as standing or *locus standi*. These requirements are set forth in law (including statutes and constitutions), court rules and procedures, and court decisions. These standing requirements apply to cases brought under statutory and constitutional claims alike, including those involving a constitutional right to a healthy environment. Standing seeks to ensure that a case will be effectively litigated and to prevent unnecessary litigation by limiting the power to sue to those individuals and entities who are actually aggrieved or have a specific interest in a matter.²⁵ Standing requirements are intended to prevent cases from being brought by uninterested persons who may not be sufficiently motivated to launch the strongest case, or worse, who may collude with the defendant. In some instances, standing qualifications require persons to suffer actual harm to their person or property or to show evidence of having participated in earlier proceedings before they can seek redress.

Standing requirements may create undue barriers to seeking relief for environmental *harms.* Where a person is specifically and uniquely harmed (for example by someone cutting down their trees or dumping waste on their land), there is usually no question they have standing. However, where an environmental harm is shared by many people (for example, in a region harmed by air pollution that violates the legal standards), many courts initially interpreted statutes to mean that it was the government's prerogative and responsibility to bring suit. In some instances, however, a government may be unable (due to limited enforcement resources) or unwilling to enforce (because it does not want to harm or embarrass businesses). But when applied to environmental matters, these standing rules can prohibit an individual from suing to protect a natural resource upon which he or she relies even when the government fails to act, thus foreclosing access to justice. These standing rules also meant that people could not protect their health, where others were also being harmed. Similarly, a requirement that actual harm have occurred makes it impossible to bring suits to *prevent* harm.

To address these problems, legislatures and courts all over the world broadened notions

²⁵ Hammons 2016; Integrated Bar of Philippines v. Zamora, G.R. No. 141284 (August 15, 2000).

of standing to ensure that aggrieved parties can bring claims and that natural resources at risk may have non-state champions in court. Recognizing that governments may lack the resources or political will to enforce environmental laws, **constitutions and environmental statutes increasingly recognize the rights of citizens to go to court to prevent and challenge environmental violations** (see Figure 5.3).

Many countries have enacted broad or universal approaches to standing for those appealing to courts to remedy environmental harms; in many instance, these broad approaches to standing are linked to the development of constitutional rights related to the environment. Like many other Latin American countries, Costa Rica's constitution enshrines the principle of *intereses difusos*, which allows individuals to bring action on behalf of the public interest, including in the interest of environmental protection.²⁶ South Africa has adopted broad statutory standing for persons acting in their own interest, on behalf of others who cannot act in their own name, in the interest of a group or class, in the public interest, and as an association acting in the interest of its members.²⁷

The Philippines is home to some of the most inclusive standing rules in the world, as Filipino law states that "Any Filipino citizen in representation of others, including minors or generations yet unborn, may file an action to enforce rights or obligations under environmental laws."²⁸ In some countries, the authority to sue extends to suits on behalf of the environment. The Constitution of Kenya as well as the country's Framework Environment Law have relaxed standing rules to give access to courts to persons seeking to protect the environment. To this end, courts in Kenya have held that litigation aimed at protecting the environment cannot be shackled by the narrow application of the *locus standi* rule, both under the constitution and statute, and indeed in principle. Any person, without the need of demonstrating personal injury, has the freedom and capacity to institute an action aimed at protecting the environment.²⁹ India's national environmental court has also greatly expanded the notion of standing, allowing the Court itself to initiate a case,³⁰ as described in Case Study 5.1.

Questions of standing also arise in the enforcement of environmental laws. Typically, enforcement proceedings are brought by the government against the person or entity accused of violating the law. But in the face of government inaction, some countries give individuals the right to bring so-called "citizen suits" to enforce the law. These provisions are designed to supplement government enforcement, sometimes requiring the citizen to give notice to the government and accused party of an intent to sue prior to bringing suit so that the government has a chance to act. For example, Australia allows individuals and organizations to bring civil suits and civil enforcement actions if they have been involved in environmental matters for the prior two years,³¹ and China recently allowed certain organizations to bring public interest lawsuits.³²

The persons with standing to challenge governmental administrative action or inaction may be broadly or narrowly defined. In some systems, standing is limited to those who can show that their individual rights have been affected, while other systems allow any

²⁶ Costa Rica Code of Criminal Procedure, art. 38; Argentina Const., sec. 43.

²⁷ South Africa Const., sec. 38.

²⁸ *See* rule 2 sec. 5 of the Kenya Rules of Procedure for Environmental Cases.

²⁹ Joseph Leboo and 2 others v. Director Kenya Forest Services & Another [2013] eKLR.

³⁰ See Gill 2013.

³¹ *See* Mcintosh, Roberts, and Constable 2017.

³² Environmental Protection Law (2015), People's Republic of China, art. 58; see also Zhang and Mayer 2017.



Case Study 5.1: Universal Standing in India's National Green Tribunal

India's National Green Tribunal was created in 2010 to hear civil cases that involve a substantial environmental question. The Tribunal has appellate jurisdiction over cases as well, and appeals of its decisions go directly to India's Supreme Court. The Tribunal is composed of justices as well as experts with technical and practical expertise in environmental matters.

The Tribunal's standing requirements allow very open access to the court. Persons may bring claims in the public interest even if they have no direct, personal connection to the matter. In addition, a person may bring a claim on behalf of a group of people, such as all of those living in a village or all fisher folk reliant on a certain fishery.

The Tribunal has also taken on cases on its own accord, which is called suo motu or sui generis, meaning "of its own motion" and "of its own kind." Once such case concerned the failure of the local government to provide safe public drinking water in Chennai, India.^a Upon hearing of situations that involved potential environmental harms, the Tribunal called parties before it to explain the situation.^b

citizen to challenge administrative decisions or failures to act in environmental matters. New Zealand's Environment Court requires only that the person bringing a case have a greater interest in the matter than the general public, or that the person represents a relevant public interest.³³ Under European Union law, some member countries' standing regimes have been broadened to allow standing to challenge governmental action as contrary to EU law, even when such groups have not been afforded standing to challenge such action under the country's own law. For example, under traditional Swedish procedural law, only the government can represent the public interest in court; Swedish courts, however, have applied EU law—including the Aarhus Convention, to which the European Union is a party—to allow environmental organizations

a. Suo Motu, Tribunal of its Own Motion (Quality water to be delivered by public tap Based on letter dated 24.07.2013 of Shri Ramchandra Srivatsaav) v. The Secretary to Government, Municipal Administration and Water Supply Department, Government of Tamil Nadu et al. (January 13, 2016).

b. Vimal Bhai v. The Ministry of Environment & Forests (2011).

³³ Birdsong 2002.

to challenge administrative decisions that might contravene EU environmental law.³⁴

A few countries, however, limit the class of persons or organizations able to bring citizen suits. China, for example, requires that nongovernmental organizations bringing environmental suits on behalf of individuals be registered with the civil affairs departments at or above the municipal level within the district; have specialized in environmental protection public interest activities for five or more consecutive years; and have no record of violation of law.³⁵

Even if someone is precluded from bringing suit to enforce environmental laws, they may be able to participate in a lawsuit brought by another party—such as by providing a statement to be entered into evidence. For example, victims of crimes in the United Kingdom may make a Victim Personal Statement describing how they have been affected by the crime, which may be used as evidence by the Crown Prosecution Service.³⁶

Finally, *a growing number of countries recognize standing for nature or natural ecosystems.* Ecuador's constitution recognizes the rights of Nature, or "Pacha Mama."³⁷ A Bolivian statute requires the state and individuals to respect Mother Earth's rights.³⁸ In New Zealand, Te Urewera, a former national park, has been declared "a legal entity, and has all the rights, powers, duties,

- 35 Environmental Protection Law (2015), People's Republic of China, art. 58.
- 36 Ministry of Justice, Code of Practice for Victims of Crime (2015).
- 37 Constitution of Ecuador, October 20, 2008, arts. 71-74.
- 38 Law of Mother Earth (Ley de la Madre Tierra Ley No. 300 de 15 de octubre de 2012), Plurinational State of Bolivia.

and liabilities of a legal person" exercisable by a board appointed on its behalf.³⁹ And a court in New Zealand has declared a river to be a legal entity with legal rights,⁴⁰ and an Indian High Court declared the Ganges River and the Yamuna River (a tributary to the Ganges), as well as Himalayan glaciers and forests at the headwaters of these rivers, to be living entities with legal rights.⁴¹ In May 2017, the Sixth Chamber of Review of the Constitutional Court of Colombia made headlines by recognizing the Atrato River, its basin, and tributaries as having rights.⁴²

In sum, *many countries are moving to increase access to justice by broadening the notion of standing.* Most countries build upon existing notions of standing and increase the ability of citizens to sue to varying degrees. Figure 5.6 shows the variety of ways standing can be broadened to increase access to courts. This allows more citizens to access courts to act on their own behalf, on behalf of others, and on behalf of the environment.

5.2.2 Financial Accessibility

Financial barriers are among the most substantial barriers to access to the courts to protect environment-related rights and address environmental violations. There are many ways that costs could deter litigants from filing or pursuing a case—and many possible solutions.⁴³

Financial barriers to accessibility start with high court fees that are charged to bring

^{Änok; Supreme Administrative Court, HFD 2014:8} (referring to art. 2(5), art. 6(1), and 9(3)-(4)); The Kynna Wolf Case (referring to art. 2(5) and art. 9(2)-(4)); RÅ 1993 ref. 97. These cases were heard by the Supreme Administrative Court (Regeringsrätten).

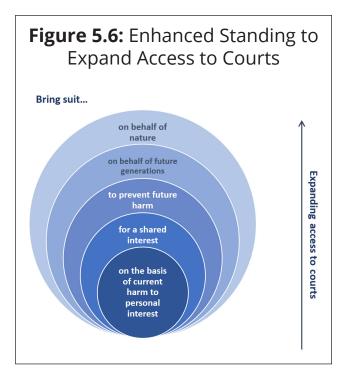
³⁹ Te Urewera Act 2014, sec. 11.

⁴⁰ Roy 2016.

⁴¹ Trivedi and Jagati 2016.

⁴² Supreme Court of Colombia, Judgment T-622 of 2016, May 7, 2017. <u>https://</u> justiciaambientalcolombia.org/2017/05/07/ sentencia-rio-atrato/.

⁴³ An excellent overview of ways that environmental courts and tribunals have reduced financial barriers can be found in Forever Sabah 2016, 43.



or sustain a case. Fees take the form of filing fees, transcription fees, and others. In Ukraine, legislation reduced court fees from five to one percent of the damage claimed.⁴⁴ However, the cost of initiating suits where damage is high can still be prohibitively expensive. For example, due to court fees one group of Ukrainian villagers living near a mine was unable to bring a case related to the adverse health effects of excess fluoride in drinking water on children.⁴⁵ In the United Kingdom, the Supreme Court held that a fee requirement for claims to the employment tribunals was unlawful on the grounds that the introduction of the fees effectively prevented access to justice.46

In environmental cases, court fees can be set to ensure they are reasonable, fees can be waived or reduced, and fees can be reduced based upon income or status as a public interest litigant. In Denmark and Sweden, for example, there are no filing fees for environmental cases in environmental courts and tribunals.⁴⁷ In the Philippines, low-income plaintiffs are exempted from paying court fees and are granted free legal counsel,⁴⁸ filing fees are reduced, simplified and inexpensive procedures are available, and the time period for adjudication is limited.⁴⁹

When litigants ask a court to stop another person from acting, such as seeking to stop a bridge from being built, they do this by requesting a preventive or temporary restraining order, as discussed in Section 5.4.1. Courts often require those seeking such an order to post a financial security bond. The bond is meant to ensure parties are not bringing frivolous suits, and if they are found to have acted in bad faith, they may forfeit some or all the bond. Australia, the United States, and a number of other countries provide that **bonds for injunctions** and temporary restraining orders can be waived or greatly reduced in environmental cases involving the public interest or persons of limited means.⁵⁰ For example, in Georgia, article 29 of the Administrative Procedure Code serves as an automatic injunction for many environmental cases as it suspends the relevant administrative act for the time of the case, thereby suspending the "requisite legality" of the activity" being challenged. While this is not a direct waiver of a bond, it essentially eliminates the need for a security bond.⁵¹

Pursuing a case can be expensive due to the costs of lawyers and experts. Many countries allow litigants to represent themselves, although this can put these litigants at a distinct disadvantage. Countries such as

⁴⁴ Sferrazza 2003, 55.

⁴⁵ Ibid.

⁴⁶ UNISON v. Lord Chancellor, [2017] UKSC 51 (July 26).

⁴⁷ Pring and Pring 2016.

⁴⁸ Nardi 2007.

⁴⁹ International Commission of Jurists 2010, 16.

⁵⁰ Riesel 2005, 26.

⁵¹ Administrative Procedure Code of Georgia, <u>https://</u> matsne.gov.ge/ru/document/download/16492/48/ en/pdf.

the Philippines appoint lawyers and experts to represent or advise litigants. In some countries, law schools or law firms may provide *pro bono* (free) representation to certain clients as well. In Brazil, law schools must provide a Center for Legal Practice for students to operate as litigators supervised by professionals,⁵² and in a limited number of cases, this service is free to those with specific economic limitations.

In many jurisdictions, the losing party must pay the court fees and litigation costs of the winning party.⁵³ This can be risky and may deter needed litigation, especially when an individual or small organization challenges corporations or the government. For example, in a case in Australia, an environmental organization unsuccessfully challenged the government's decisions regarding two coal mines and their potential impacts on climate change.⁵⁴ A commentator noted that the "case [only] occurred because the client was prepared to risk their organisation to run the litigation."⁵⁵ When the organization lost the suit, it went bankrupt and was dissolved.

The prospect of facing such costs (and personal liability) in the event of a loss can deter public interest and other parties from bringing a case. As a result, in some countries each party bears its own costs regardless of outcome, absent clear abuse or misconduct (the so-called "American rule"), or costs may be capped. plaintiffs that substantially prevail can claim

Relaxing procedural requirements and holding more informal hearings can help reduce the burdens on litigants without representation, and many environmental courts and tribunals adopt such strategies. As discussed in Section 5.3.4, many courts encourage parties to use alternative dispute resolution processes to avoid the cost and time involved in complex litigation. Although it is not guaranteed that such processes will be cheaper than traditional litigation, this is usually the case. In other instances, government provides financial support for indigent parties or public interest litigants. Figure 5.7 illustrates some of the easiest ways that countries can reduce financial barriers in environmental cases.

attorneys' fees.58

Some countries seek to encourage public interest environmental litigation by providing for the award of attorneys' fees if a party sues successfully on behalf of the public. For example, interpretive guidance issued by China's Supreme People's Court on the 2015 Environmental Protection Law allows the winning party to recover attorneys' fees; additionally, the losing plaintiffs can claim awards from the Supreme People's Court on the basis of inspection and ecological restoration and other necessary costs.56 In South Africa, the Constitutional Court held that where a public interest litigant is "substantially successful" in vindicating constitutional claims (in that case, access to information) that the party was entitled to an award of costs.⁵⁷ And most environmental laws in the United States provide that

⁵² Brazil Ministry of Education, High Education Chamber of the National Board of Education (Câmara de Educação Superior do Conselho Nacional de Educação), Resolution CNE/CES 09/2004, art. 7(1).

⁵³ See generally Vargo 1993.

⁵⁴ Wildlife Preservation Society of Queensland Proserpine/Whitsunday Branch Inc. v. Minister for the Environment and Heritage [2006] FCA 736.

⁵⁵ Ibid.

⁵⁶ Finamore 2015.

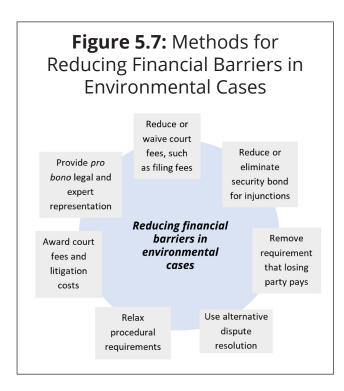
 ⁵⁷ Biowatch Trust v. Registrar Genetic Resources and Others (CCT 80/08) [2009] ZACC 14; 2009 (6) SA 232 (CC) ; 2009 (10) BCLR 1014 (CC) (3 June 2009).

⁵⁸ May 2003; Percival et al. 2018.

5.2.3 Geographic Accessibility

Just as cost can be a barrier to justice, so too *"geography alone can diminish access to justice."*⁵⁹ Courts, tribunals, and government agencies tend to be in population centers and so are only readily accessible to those who are already there or who have the means and the time to travel there.

One strategy to address such problems of geography is to hold initial and preliminary proceedings close to the location of the dispute. Another is to make it possible for the parties to participate by telephone or other remote link instead of requiring their presence in a courtroom. If technology is used to hold proceedings, it is of course important that the technology be available to all parties.



When in-person hearings are necessary, **the court may be able to go to the location of the dispute**. In New South Wales, Australia, the judges of a specialized land and environmental court located in the capital have adopted a number of innovations:

- Land and Environment Court documents can be filed at any Local Court in New South Wales. There are over 150 Local Court courthouses across the state.
- Directions hearings and other preliminary court proceedings are usually conducted by telephone or by using the Court's secure online forum for filing, listings, directions, and communication between parties.
- Final hearings are often conducted at the site of the dispute.
- The Land and Environment Court often sits in country courthouses located near the parties.
- Parties and their legal representatives can communicate with the Court by email or registered users can communicate through eCourt.⁶⁰

The judges of several other specialized environmental courts and tribunals, including the State of Amazonas Environmental Court in Brazil, travel great distances— by airplane, boat, or a bus specially equipped as a courtroom—to hold hearings near the location of the dispute.⁶¹

As well as the advantage to the litigants of not having to travel to a central hearing location, holding hearings near the site of the dispute enables the court to make a site visit, with the parties and any lawyers present, prior to or during the hearing. This

⁶⁰ Land and Environment Court 2015.

⁶¹ Pring and Pring 2009, 31.

⁵⁹ Pring and Pring 2009, 31.

may allow the court to better understand the evidence and to place the dispute in its realworld context. For example, the judges of the Vermont (U.S.) environmental court conduct site visits in almost every case that goes to trial, because seeing the location is so useful in fully understanding the parties' testimony, plans, and photographs.⁶² Depending on the available time and nature of the case, the site may be visited on the day of the trial, or may be conducted separately in advance of or after the trial. In some cases, it may even be helpful to take two site visits in different seasons of the year, for example, to see the appearance of a site when leaves are present on deciduous trees, and also when the trees are bare.



5.2.4 Access to Specialized Knowledge

Individuals are unlikely to seek remedies for environmental harms or violations if they are unaware of available environmental remedies and of the forums in which to pursue the claims and if they do not have access to legal and technical expertise to pursue

those remedies. Even if courts and tribunals are available in principle, *many people and communities lack the legal and technical knowledge and skills to effectively bring their cases to court or present them.*

As discussed above, cost may be a barrier to accessing lawyers and technical experts. But even before cost is considered, the very existence of well-trained lawyers and technical experts who can recognize and pursue environmental claims is necessary. The number of environmental lawyers and experts remains relatively small, particularly in developing economies. In many developing economies, there are only a few (often fewer than five) practicing environmental attorneys. Judge Samson Okong'o of Kenya's Environment and Land Court noted the difficulties facing the Court because of the "lack of expertise and experience both at the bench and the bar particularly on environmental law."63 Thus, the teaching of environmental topics in law and scientific education is important to make access to justice possible.

Access to experts does not have to mean access to those with advanced educational degrees. Experience with environmental matters is the critical skill—people who are aware of environment-related rights and the various avenues available to redress environmental harms are essential. Many community activists and nongovernmental organizations fulfill this need, as demonstrated in Case Study 5.2. In fact, the existence of environmental nongovernmental organizations is often a key element in identifying environmental harms, bringing attention to environmental issues in disadvantaged communities, and helping people find the necessary expertise. As a result, laws and policies that allow nongovernmental organizations to exist

^{5.} Justice

⁶² Wright 2010, 211

⁶³ Okong'o 2017.

Case Study 5.2: Lake Turkana Community Trust Protects Community Rights

Development of dams along Ethiopia's Omo River may reduce water flow into Lake Turkana, the largest alkaline lake in the world that also supports several indigenous communities and a World Heritage Site. Much of Lake Turkana lies within Kenya. The Lake Turkana Community Trust is a grassroots organization that fosters social, economic, and environmental justice in the Lake Turkana Basin. When the Kenyan government entered into a power purchase agreement to buy 500 megawatts of electricity from Ethiopia, the Trust sued on behalf of the communities seeking information about the power purchase agreement.

Kenya's Environment and Land Court found that the government has "a duty to establish that no environmental harm arises from the [electricity] agreements" and projects with the Ethiopian government. Further, "as trustees of the environment and natural resources [the Kenyan government] [owes] a duty and obligation to the [communities] to ensure that the resources of Lake Turkana are sustainably managed, utilized and conserved, and to exercise the necessary precautions in preventing environmental harm that may arise from the agreements and projects entered into with the Government of Ethiopia in this regard."^a

The Court ordered the government and power purchasers to disclose all relevant information and to take all steps necessary to ensure that the resources of Lake Turkana are used sustainably and conserved in any agreements with the government of Ethiopia regarding the purchase of electricity.

and thrive are key components of access to justice. $^{\mbox{\tiny 64}}$

Some countries with specialized environmental courts and tribunals appoint experts and lawyers to assist environmental claimants not otherwise represented (for example, New Zealand has a system to pay for attorneys or experts for non-profit organizations).⁶⁵ In addition, they may have simplified procedures or collect evidence themselves. These approaches can help overcome knowledge and skill barriers to access to justice as well as resource barriers.

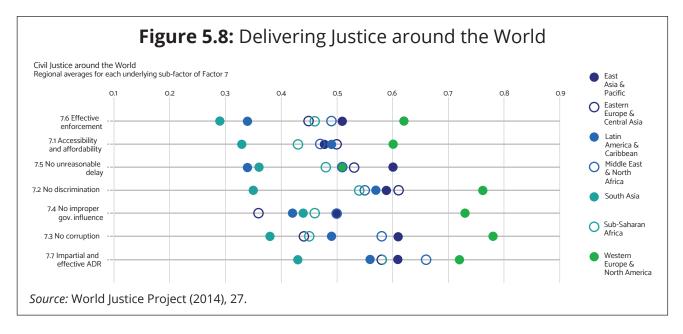
5.3 Adjudications

Fair and transparent judicial and tribunal proceedings are a key element in delivering justice. When courts, tribunals, commissions, or other bodies adjudicate an environmental case, *it is critical that the proceedings be conducted by capable and impartial*

a. Lake Turkana Community Trust v. Attorney General, Republic of Kenya Environment and Land Court, No. 825 of 2012.

⁶⁴ Straughan and Pollak 2008, 9; Kameri-Mbote 2005, 3-4.

⁶⁵ Preston 2014; Ministry of the Environment, New Zealand 2017.



adjudicators using efficient procedures that result in reasoned and transparent decisions.

These elements, which are discussed below, increase the likelihood that there will be accountability for environmental violations and that harms to environment-related rights will be addressed, that parties will meet their environmental responsibilities, and that parties who violate environmental law will be held accountable. Further, these elements increase public confidence in the tribunals, their decisions, and rule of law in general. However, as Figure 5.8 shows in the broader rule of law context, successfully delivering all of these elements of justice is a challenge around the world.

5.3.1 Fair Proceedings

Fair proceedings are an essential characteristic of effective adjudication. Even if the ultimate decision is correct as a matter of law, without parties perceiving that the process was fair and equitable, the decision may not be respected or followed, and respect for the rule of law may be undermined. A large body of research shows that **when** citizens perceive officials (particularly law enforcement officials) to be acting fairly, the public is more likely to cooperate and comply *with the legal system*.⁶⁶ To ensure the judicial system is seen as fair, parties to a proceeding must have the opportunity to present their evidence and arguments; decisions must be made on a reasoned basis and based on the law; and proceedings must be free from undue influence and corruption.⁶⁷ The substantive law and the procedural rules must be applied equally to all participants, without regard to their position or wealth. When these steps are not followed, the results may arouse public protest and lack of trust in the legal system.

For example, in South Africa, the development of a "One Environment System" with shared decision-making authority between the local environmental regulator and the local mining licensing agency led to lax oversight. This allowed the owners of the Tormin mine, represented by MRC,

⁶⁶ Murphy 2009.

⁶⁷ *See* Burke and Leben 2007; Rottman 2007; Cramton 1971; Tyler 1984.

a holding company, to change their mining methodology as it suited them.

MRC moved the main mine processing zone above a cliff, so heavy utility vehicles had to haul sand from the beach. MRC received permission from the local mining licensing agency to construct an illegal jetty and expand the processing plant, although evidence suggests the mining company had already been expanding before securing approval. For the transportation of the mineral sand from Tormin to local ports, the transportation department allowed MRC to opt for truck transport rather than a much more efficient rail system; MRC exceeded its 4-trucks-a-day permit by over 100. Not long thereafter a substantial portion of the cliff underneath the processing plant collapsed. After the regional environmental regulator inspected the mine, MRC sued the environmental regulator claiming the inspection constituted an illegal raid without a legitimate search warrant.⁶⁸ Further, a subsidiary of MRC filed a defamation suit against two attorneys from the Center of Environmental Rights and another activist for US\$1.25 million.⁶⁹ This attempt to intimidate and disable organizations protecting the environment and local communities by burdening them with heavy legal costs and risk has caused further unrest, weakening public faith in the fairness of the regulatory system.⁷⁰

5.3.2 Capable Judges Acting with Integrity

Effective environmental adjudicators are both capable and fair-minded. One of the four universal principles of rule of law, according to the World Justice Project, is that *"Justice is delivered timely by competent, ethical, and*

independent representatives and neutrals who are of sufficient number, have adequate resources, and reflect the makeup of the communities they serve."71 For judges to act with integrity and be unprejudiced, it is important for them to be able to operate independently and without fear of retribution for their decisions. As discussed in Chapter 2, ensuring judges receive adequate pay, have a mandate for independent operation, abide by ethics policies, and are subject to other corruption deterrents can reduce the risk of corruption and undue influence. Successful courts are insulated from political manipulation by having their budgets protected from political interference, their judges paid commensurately with other professions, and salary levels set by independent bodies, not politicians.72

For example, the Environmental Review Tribunal of Ontario, Canada, operates as a decisionally independent body.⁷³ The role of the tribunal is to decide on cases relating to 11 environmental and planning statutes primarily the Environmental Assessment Act, the Environmental Protection Act, the Ontario Water Resources Act, the Nutrient Management Act, the Safe Drinking Water Act, the Waste Management Act, and the Pesticides Act. ⁷⁴ Operating under the Ministry of the Attorney General, rather than the environmental agency, enables the Tribunal to have independence when reviewing cases relating to other governmental entities.⁷⁵

Due to the complexity and technical nature of many environmental matters, it is particularly important that judges be knowledgeable and competent regarding environmental law. Lack of understanding of

73 *See* <u>http://elto.gov.on.ca/tribunals/ert/about-the-</u><u>ert/</u>.

75 Pring and Pring 2016, 36.

⁶⁸ Open Society Foundation for South Africa 2017.

⁶⁹ Business and Human Rights Resource Centre n.d.

⁷⁰ Bruce 2017.

⁷¹ World Justice Project 2014, 4.

⁷² Pring and Pring 2009, 75.

⁷⁴ Ibid.

the many unique aspects of environmental cases, ranging from standing requirements to substantive law, is a common problem. This is particularly true in small jurisdictions, which may have only a single judge with only general judicial training. The importance of judicial training in environmental law and procedure is illustrated by Case Study 5.3.

As discussed in Section 5.3.3, creation of specialized environmental courts and tribunals is one way of ensuring that adjudicators have the requisite skills to decide environmental cases. Some courts and tribunals address this need by having technically-trained judges decide cases or have technical experts who are not judges hear cases with judges. For example, each of Sweden's five regional Environmental Courts features a panel made up of a judge with legal training, a technical advisor on environmental issues, and two lay experts. The Swedish Environmental Court of Appeals also substitutes a technical expert for a legally trained judge in some cases.⁷⁶

Countries, including Brazil, Indonesia, and South Africa, are undertaking to educate judges about environmental law and cases. The serious, international need for judicial education on environmental law motivated the formation of the Global Judicial Institute on the Environment in 2016, which seeks to enhance the capacity of judges around the world to decide environmental cases.⁷⁷

5.3.3 Specialized Courts and Tribunals

As environmental law has proliferated globally, so have new ways of resolving environmental disputes and violations. Historically, courts have struggled with

Case Study 5.3: Case Dismissed in Ecuador

Ecuador has one of the strongest constitutional provisions protecting the rights of nature. An environmental nongovernmental organization and community members brought an action to prevent the establishment of a pine tree plantation in sensitive native grassland. The judge ruled that the claimants could not bring the lawsuit because they themselves had not been harmed, because the harm had not yet occurred, and because the evidence had not been presented as required in criminal cases.^a The judge was not aware of the constitutional provision allowing any person to bring a suit on behalf of nature, including those not personally harmed; that a constitutional claim allows preventive action before harm is committed; or that constitutional claims may be brought based on written affidavits.

a. Boyd 2017.



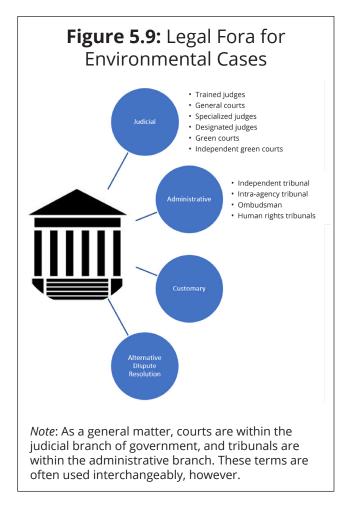
⁷⁶ Ibid., 27.

⁷⁷ IUCN 2016.

the complexity of environmental statutes and the scientific and technical issues they raise, and some judges avoid such cases. Then-U.S. Supreme Court Justice Antonin Scalia famously complained about the technical aspect of an environmental case saying "I told you before, I'm not a scientist. That's why I don't want to have to deal with global warming, to tell you the truth."78 Unfortunately, this is not an isolated sentiment. It highlights both the need for judges to become more scientifically literate to understand and rule on environmental cases, and the opportunity to create specialized bodies with appropriately trained judges to hear environmental cases.

Over 40 countries and many subnational jurisdictions have established specialized procedures, courts, and tribunals for hearing environmental disputes in an attempt to ensure swift and efficient justice in environmental matters. Figure 5.9 illustrates a wide range of legal bodies that countries have created to resolve environmental disputes.

Virtually all countries provide for resolution of environmental cases within a judicial court system. Providing judicial education about environmental law is important in ensuring that the general court system can manage environmental matters, otherwise judges will likely be ill-equipped to hear environmental cases. Another important approach to understanding environmental science is to receive briefs from qualified individuals and organizations as amici curiae ("friends of the court") who may not qualify for party status in the proceeding. For example, the U.S. Supreme Court has addressed the criteria for admission of scientific and other technical evidence in civil litigation, and on two occasions essentially adopted the views



advanced by organizations representing the scientific community as amici curiae.⁷⁹

Some countries train specialized judges in environmental law or designate certain judges to act as environmentally-specialized judges. The range of approaches varies dramatically, with some countries designating judges as "green" yet providing no specialized environmental training (for example, Brazil); others providing training but not directing environmental cases to these judges (for example, the State of New York in the United States of America); and others both training judges and assigning environmental cases

⁷⁹ Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993); Kumho Tire Co. v. Carmichael 526 U.S. 137 (1999).

⁷⁸ U.S. Supreme Court Oral Argument, Nov. 29, 2006.

to them (for example, judges interested in adjudicating environmental cases in Indonesia are required to participate in a Judge Certification Program).⁸⁰ Some countries (such as Sweden and New Zealand) allow technical experts to hear environmental cases with law-trained judges. And others may appoint "special masters" to hear environmental cases. These approaches can improve the ability of general courts to handle environmental cases, provided the judges and experts are prepared to hear the cases and the cases are assigned to those judges and experts.

As of 2017, 26 countries have created special national environmental courts to manage specific environmental disputes (see Figure 5.10). This understates the frequency of environmental courts, though, as some countries have environmental tribunals and even more countries have subnational environmental courts and tribunals, as shown in Figure 5.11: as of 2016, there were over 350 environmental courts or tribunals in over 40 countries around the world including those established at the regional, provincial, or state level.⁸¹ Operationally independent environmental courts are free-standing courts that are separate from the general courts. The New South Wales Land and Environment Court in Australia is one such example, described in Case Study 5.4. Decisionally independent environmental courts are specialized courts within the general court system that have the power to make their own procedures, rules, and decisions. These courts also provide the kind of specialized attention that can result in better informed and faster resolution of disputes. The Environmental Division of the Vermont Superior Court (USA) represents one example of a decisionally independent court.82

In June 2014, China's Supreme People's Court established the Environmental and Resource Tribunal, and instructed the courts in all regions to enhance the establishment of judicial organs for environmental and resource cases.⁸³ As of April 2017, the courts in all regions had established 956 tribunals, collegiate panels, and circuit courts for environmental and resource cases; in addition 18 higher people's courts, 149 intermediate courts, and 128 grassroots courts have established environmental and resource tribunals.

Countries frequently provide for environmental adjudication within government environment ministries

and agencies. This allows for a level of administrative review before appeal to the judicial system. These environmental tribunals can help to resolve disputes and address violations more quickly, cheaply (for both parties), and with more technical expertise than the general court system. There are different models for such environmental tribunals. Some environmental tribunals, such as Kenya's National Environment Tribunal (see Case Study 5.5), are fully independent of the agency whose decisions they review. They may be housed within the same ministry or agency or be housed in an agency other than the one whose decisions they review. Other environmental tribunals are intra-agency, meaning they are under the control—fiscally, administratively, and with regard to policy of the same agency whose decisions they review, although the tribunals may still retain significant decisional independence.

In some countries, such as Timor-Leste and Afghanistan,⁸⁴ customary and traditional courts and dispute resolution methods operate in tandem with statutory judicial and administrative systems. This situation is

⁸⁰ Pring and Pring 2016, 11, 24.

⁸¹ Ibid., xiii. For example, Vermont and Hawaii (in the United States), Amazonas (Brazil), and New South Wales (Australia).
82 Ibid., 25.

⁸³ Supreme People's Court 2017.

⁸⁴ Miyazawa 2013; Sait 2013; *see generally* Meinzen-Dick and Pradhan 2016.

^{5.} Justice

Case Study 5.4: The New South Wales Land and Environment Court

In operation since 1980, the Land and Environment Court of New South Wales, Australia, was the first specialist environmental court established as a superior court of record. It has exclusive jurisdiction over civil and criminal environmental, land planning, building, and mining matters. Its decisions are reviewed by the civil and criminal appeals courts and the Australian High Court, but its operations and decisions are largely independent. It has six law judges, 22 science-technical commissioners, and a registrar with far-reaching administrative and quasi-judicial powers. The Court is renowned for many procedural innovations tailored to environmental cases, many of which are discussed in this chapter, and it has become a model for other States in the creation of their own environmental specialist courts and their own environmental jurisprudence.

The Honorable Justice Brian J. Preston, then Chief Judge of the Court, has identified twelve benefits of the Court.^a One of the biggest benefits (and one of the original goals of the Court) is that the judges have been able to acquire specialist expertise. This not only facilitates a better understanding of the complex nature of environmental disputes, but also allows the Court to provide a wide variety of dispute resolution mechanisms.^b Additionally, the Court has developed a large body of case law in a number of key areas such as open standing provisions for public interest litigation and the principle of polluter pays. For example, in the 1997 case of Environment Protection Authority v. Gardner, the Court imposed the maximum penalty (12 months imprisonment and AU\$250,000 in fines) for extensive environmental pollution that was perpetrated in a deliberate and dishonest manner. This decision saw widespread media coverage and became a deterrent for individuals and industry.^c In its almost 40 years of existence, the Court has been an influential factor in raising the government's, industries', and the public's awareness of environmental law issues in general.^d The Court decided 83 cases from January through August 2017 alone. Finally, while large,

established courts can be conservative, leading to slow change that is heavilyresisted, the flexibility and innovation accorded this specialized court allows it to achieve quick practical and procedural changes.^e

a. Preston 2008, 25.

- c. Pearlman 2000, 398-399.d. Ibid., 406.
- e. Preston 2008, 30.



(Pictured from left): New South Wales Environmental Defender's Office solicitor Sarah Roebuck, Barristers Jason Lazarus and Josie Walker, and Friends of Tumblebee President James Ryan at New South Wales Land and Environment Court in Sydney

b. Ibid., 26.



Members of Kenya's National Environment Tribunal meeting with Hon. Justice Augustino Ramadhani (at right), President of the African Court on Human and Peoples' Rights

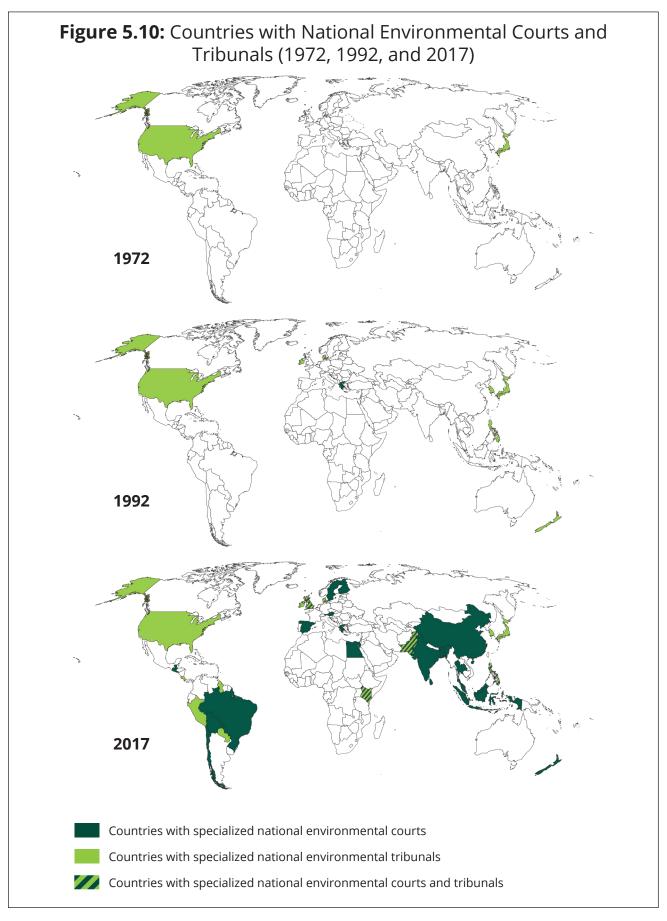
Case Study 5.5: Kenya's Specialized Environmental Court and Tribunal

Kenya has two specialized fora for adjudicating environmental matters: the Environment and Land Court and the National Environment Tribunal. The Environment and Land Court is a superior court with the same status as Kenya's High Courts. It hears and decides disputes relating to the environment and the use, occupation of, and title to land. Appeals against its decisions lie with the Court of Appeal.

The National Environment Tribunal is established under Kenya's Framework Environment Law to receive, hear, and decide appeals arising from decisions of the National Environment Management Authority on issuance, denial, or revocation of environmental impact assessment licenses, among other issues. The tribunal was established out of the realization that cases of environmental degradation were rampant, yet ordinary courts were taking relatively long to decide them, during which period the affected parties and the environment itself suffered, sometimes to a point beyond repair. Moreover, there needed to be a more flexible dispute resolution mechanism to encourage parties with environmental disputes to seek justice to allow sustainable development to take place. Further, while ordinary citizens had been legally endowed with environment-related rights to be protected, court processes were often expensive. The Tribunal sought to ensure that citizens could have effective access to justice.^a The tribunal decides its own operating rules and procedures and functions like a court of law with broad authority to approve, overrule, or modify the Authority's decisions. The Tribunal may issue environmental impact assessment licenses or enjoin a project if it overrules the Authority's decision. The Tribunal can appoint experts to assist it in deciding cases, and it makes its own rules of procedure "simple and precise ... to ensure the proceedings are informal and people-friendly." Its fees are lower than the courts to ensure accessibility to all in need. The Tribunal has decided over 140 cases since 2005.^b

a. Ministry of Environment & Forestry. n.d.

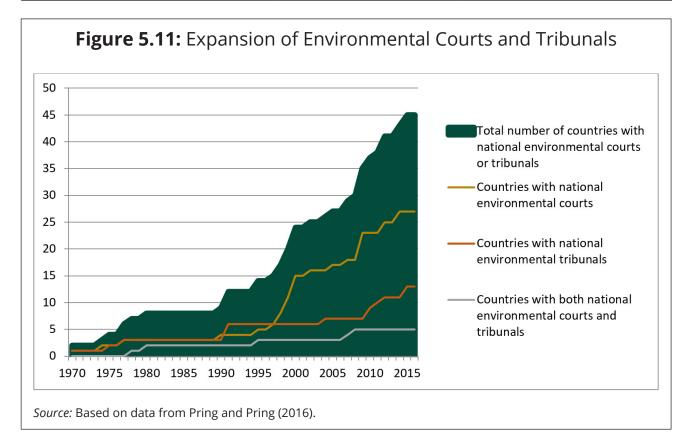
b. Kaniaru 2011-2012; Pring and Pring 2016, 33.



Year	Countries with specialized national environmental courts	Countries with specialized national environmental tribunals	Countries with specialized national environmental courts and tribunals
1972		Japan, United States	
1992	Greece	Denmark, Ireland, Japan, New Zealand Philippines, Republic of Korea, United States	
2017	Austria, Bangladesh, Bhutan, Bolivia, Brazil, Chile, China, Egypt, El Salvador, Finland, Gambia, Greece, Guatemala, India, Indonesia, Malaysia, New Zealand, Spain, Sri Lanka, Sweden, Thailand, Trinidad and Tobago	Antigua and Barbuda, Costa Rica, Denmark, Guyana, Ireland, Jamaica, Japan, Malta, Mauritius, Paraguay, Peru, Republic of Korea, Samoa, United States	Kenya, Pakistan, Philippines, United Kingdom

Note: Precursors of environmental courts and tribunals such as land courts and water courts were not included in this map. The map highlights countries with confirmed, operational national environmental courts and tribunals and does not include those that have been authorized but are not yet operational. Some countries have multiple national environmental courts and tribunals.

Source: Environmental Law Institute, based on data in Pring and Pring (2009) and Pring and Pring (2016).



referred to as "legal pluralism." If customary law applies to a local dispute over water rights, for example, a traditional court may resolve the dispute using customary rules. Such customary courts are usually much more accessible, as they are inexpensive, fast to decide, and do not involve the procedures and processes of the judiciary. Moreover, people are often more familiar with customary courts, which thereby enjoy more popular legitimacy. These courts' decisions are often referred to and reviewed by relevant agencies and courts to ensure there is not a conflict with statutory and judicial law and process.

Other fora are available for environmental dispute resolution, including environmental ombudsman and human rights commissions. Ombudsmen often investigate complaints and report to other authorities, which may follow up with enforcement or other action. For example, Wales and Hungary have the Future Generations Commissioner⁸⁵ and Commissioner for Fundamental Rights,⁸⁶ respectively, which oversee the rights of future generations, while the Philippines has an environmental ombudsman who oversees environmental infractions by public officials.⁸⁷ Human rights commissions are often involved because of the intersection between human rights and environmental issues, as discussed in Chapter 4.

It is important to consider how the various courts, tribunals, and other fora may relate to one another in addressing environmental matters. When dealing with enforcement of environmental laws, whether enforcement can be pursued through criminal, civil, administrative, customary, or alternative dispute resolution mechanisms affects the perceived severity of the violation and the remedies available. While criminal proceedings and sanctions should be reserved for the most serious violations, many countries have yet to adopt administrative enforcement procedures and penalties for minor environmental violations. The lack of civil and administrative remedies may cause enforcement authorities to avoid bringing criminal charges for cases that arise from less egregious infractions, that have modest environmental impacts, and that would incur modest penalties. Similarly, directing minor violations to administrative, not judicial, proceedings helps conserve prosecutorial and judicial resources for the most egregious infractions. Moreover, violators may feel that while they may have broken a particular environmental law, they are not "criminals" and they are more likely to vigorously fight criminal charges. For these reasons, **a** growing number of countries are adopting administrative enforcement systems to address environmental violations. For example, Liberia is developing administrative notice, hearings, and penalties for minor violations—namely, those violations that did not result in physical injury to any person, significantly harm the interests of a local community, result in more than USD 10,000 in damage to the environment or forest resources, or rise to the level of a felony.88

In sum, countries are actively developing various fora for environmental adjudication that fit their specific contexts. Many competing factors must be balanced to provide swift, fair, inclusive, and inexpensive resolution of environmental disputes and violations. A best practices guide released in 2016 offers a summary of experiences from across the globe that can be useful in weighing the options and their respective merits and trade-offs.⁸⁹

⁸⁵ Future Generations Commissioner for Wales n.d.

^{86 (}Hungary) Office of the Commissioner for Fundamental Rights n.d.

⁸⁷ Office of the Ombudsman 2017.

⁸⁸ Liberia Forestry Development Authority, Regulation No. 109-07 (Regulation on Penalties). <u>http://www. ecolex.org/details/legislation/regulation-onpenalties-fda-regulation-109-07-lex-faoc160088/</u>.

⁸⁹ *See* Pring and Pring 2016.

5.3.4 Innovative and Efficient Procedures

Many courts struggle with large caseloads and significant case backlogs. In the worst cases, it can take years for a case to reach trial, years for a decision to be delivered, years for the appeals process to run its course, and then years later to actually receive compensation. For example, litigation relating to the 1989 Exxon Valdez oil spill did not end until 2015, 26 years later.⁹⁰ Legal procedures themselves are intended to provide fairness and predictability by setting clear ground rules, but the legal axiom that "justice delayed is justice denied" can be particularly apt in environmental cases where delay may mean that a project moves forward, harming resources, or that communities continue to be exposed to harmful conditions, damaging their health. Innovative countries have adopted several strategies to tackle this pervasive issue.

As noted above, *many specialized environmental courts have streamlined*

procedures. These allow cases to move more swiftly than those on a conventional court docket. Rule 1 of the Vermont Rules for Environmental Court Proceedings, for example, states that the rules are to be interpreted and administered to "ensure ... expedited proceedings consistent with a full and fair determination in every matter coming before the court."⁹¹ The Environmental Division of the Vermont Superior Court (USA) holds conferences with the parties soon after a case is filed to establish an appropriate sequence and schedule tailored to the needs of each case.⁹² The Land and Environment Court of New South Wales (Australia) appoints a registrar to monitor reports from the parties to make sure that the schedule is followed.⁹³ This court also provides the registrar with special powers usually reserved to judges, such as waiving rules in particular cases and referring cases to mediation or arbitration.

Because court procedures can be cumbersome, *many courts encourage parties* to seek alternative dispute resolution, such as arbitration or mediation, or refer the cases to these processes before allowing the court cases to proceed. Such procedures can result in swifter dispute resolution. For example, the National Environment Dispute Resolution Committee was established by the Republic of Korea in 1991 under the Ministry of the Environment to provide "rapid, fair, and economical" "adjustment" of disputes.94 Adjustment is defined as "settlement through conciliation, mediation, and arbitration." The Committee has reviewed more than 2,400 disputes involving the government (at any level) as a party and disputes that involve two or more cities. In addition, local dispute resolution commissions hear cases involving local disputes valued at less than approximately USD100,000.

Alternative dispute resolution is often used in conjunction with both general and environmental courts and tribunals.⁹⁵ Alternative dispute resolution allows parties to resolve, rather than litigate, disputes using processes like conciliation, facilitation, mediation, fact finding, mini-trials, arbitration, and ombudsmen. Alternative dispute resolution can often address issues that are outside the legal jurisdiction of a court or agency but that may be at the center of the dispute between parties.⁹⁶

⁹⁰ Alaska News 2015.

⁹¹ Vermont Rules for Environmental Court Proceedings, rule 1.

⁹² Pring and Pring 2009, 77; Vermont Rules for Environmental Court Proceedings, rule 2(d).

⁹³ Ibid.

⁹⁴ Asian Development Bank 2011.

⁹⁵ See O'Leary and Raines 2001; Siegel 2007.

⁹⁶ See UNGA 2011 (on Strengthening the role of mediation in the peaceful settlement of disputes, conflict prevention and resolution).

Through the Resource Management Act, New Zealand created an Environmental Court that embraces the use of alternative dispute resolution by providing Environment Commissioners specifically trained for this purpose. Upon reaching a resolution to the dispute, the Environmental Court approves the outcome making it legally operative.⁹⁷ Japan provides for a similar process through the use of an Environmental Dispute Coordination Commission.⁹⁸

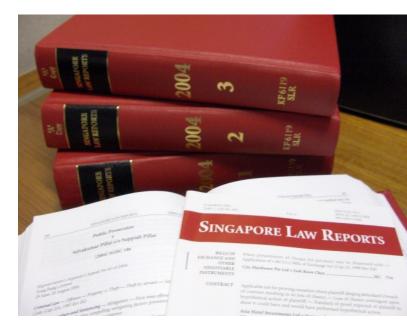
These mechanisms usually have less rigid and less costly procedures and processes than courts and tribunals, which can make them more accessible to all parties. Alternative dispute resolution usually does not result in a decision or outcome document that can be reviewed and relied upon by parties that were not involved in the dispute. Thus, unlike formal court or tribunal proceedings in common law countries that result in formal decisions, the outcomes of these alternative proceedings usually do not explicate the law and how it is applied in various contexts.

5.3.5 Reasoned and Transparent Decisions

The end result of an environmental adjudication should be a fair, reasoned, and transparent decision. Decisions are subject to scrutiny and criticism by those aggrieved as well as those prosecuted, reviewing courts, politicians, and the public; absent sound and transparent reasoning, the adjudicator may be unable to defend the result reached.

Decisions that fail to explain their reasoning and are not transparent have greatly limited usefulness. *Decisions help to inform the parties and the public how the applicable law is to be interpreted and applied.* This is particularly important in a relatively new area like environmental law where the law has yet to be fully articulated, understood, or mainstreamed. By explaining the decision in detail and describing the facts and circumstances at issue, the decision can be used to inform future circumstances and cases. The decision can help the regulated community understand its obligations as well and can reassure the public that the decision is not based on undue influence. This helps to build predictability of law and confidence in legal process and institutions. As such, transparent and reasoned decisions are important in both civil law and common law systems.

In many countries, court rulings have traditionally not been made public or not been made widely publicly available. Many rulings are made orally and may not include the legal reasoning used to reach the decision. Recording rulings in writing and making them widely publicly available educates stakeholders about the law, increases predictability of outcomes, and allows other courts to understand the ruling. For example, Kenya publishes the rulings from its Court of Appeal and Supreme Court



⁹⁷ Mediators Beyond Borders n.d.

⁹⁸ Access Facility 2013.

and Enforcement			
Remedy	Effect		
Preventive and injunctive relief	Maintain the status quo; stop harmful behavior		
Declaratory relief	Provide clarity as to what the law says and means		
Fines and money penalties	Remove economic incentive; punish noncompliance		
Compensation	Make harmed parties whole		
Corrective orders	Require parties to act to correct harm		
Imprisonment and other criminal sanctions	Punish noncompliance; deter future violations		
Administrative penalties	Punish noncompliance for minor violations		
Supplemental environmental projects	Provide direct environmental benefits		

Figure 5.12: Remedies Needed for Environmental Adjudication and Enforcement

on the judiciary's repository website (www. kenyalaw.org). InforMEA, the UN Information Portal on Multilateral Environmental Agreements, and ECOLEX, an information service on environmental law operated jointly by UN Environment, the Food and Agriculture Organization of the United Nations, and the International Union for the Conservation of Nature, are global resources that collect and disseminate judicial decisions (see Chapter 3). For courts generally, if rulings are made orally, transcripts can be made available to the public, ideally for a nominal or no fee.

5.4 Effective Remedies

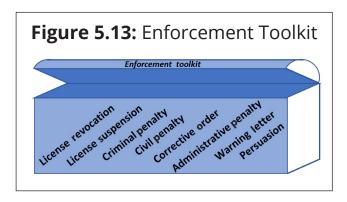
Courts and tribunals need to be able to order remedies that can effectively address the harm and violation before them and deter future violations. Without sufficiently high fines and adequate powers to order specific actions, courts are left toothless. Environmental cases present unique challenges that may make traditional forms of relief insufficient.

Courts and tribunals must be able to grant meaningful legal remedies in order to resolve disputes and enforce environmental laws. As shown in Figure 5.12, legal remedies are the actions, such as fines, jail time, and injunctions, that courts and tribunals are empowered to order. For environmental laws to have their desired effect and for there to be adequate incentives for compliance with environmental laws, **the remedies must both redress the past environmental harm and deter future harm.**

It is important to bear in mind that the type of proceeding being brought (e.g., criminal, civil, or administrative) affects the type of remedy that will be available. For example, fines are usually sought by governments in enforcement actions against violators of a statute, while private parties harmed in an environmental incident usually seek compensation to be made whole.

In seeking sanctions in an enforcement action, many consider the enforcement toolkit shown in Figure 5.13. It demonstrates that agencies and prosecutors generally prefer to encourage the regulated community to comply with environmental regulations through education and persuasion and escalate to sanctions through warning letters, administrative penalties, civil penalties, criminal penalties, license suspension, and, as a last resort, license revocation. Many countries' laws, however, may not give enforcement agencies all of these options—some countries only allow criminal prosecution of environmental law violations.

Similarly, when adjudicators hear environmental disputes, they need a variety of remedies and tools to use to address the issues at hand. If a court or tribunal cannot order a party to compensate another party for the environmental harm done or to restore a resource to its previous state, then justice may not be served.



Too often, in both enforcement and adjudications, courts and tribunals have authority to hear and adjudicate cases, but their ability to take meaningful action once they have reached a decision is constrained. They may be empowered to levy fines that are less than the benefits that accrue from continued noncompliance; they may lack authority to enjoin a harmful behavior; or they may not be able to monitor whether their orders are implemented. Courts and tribunals need a toolkit with a complete set of remedies, ranging from preventive orders, to fines, compensation, corrective orders, imprisonment, and various innovative approaches, as discussed below.

5.4.1 Preventive and Declaratory Orders

The ability to prevent environmental harm before it occurs or while a case is pending is an essential remedy. This can take the form of preventive orders, such as injunctions, temporary restraining orders, or other orders to maintain the status quo, cease harm, or take immediate preventive action. This capability is so important that in 2015 the Supreme People's Court of China found that China's 2014 Environmental Protection Law provides jurisdiction not only to address past and ongoing harm but also to address actions that "have a great risk of harming the public interest" in the future.⁹⁹

These remedies are particularly important in environmental matters where a new project may be on the verge of impacting a protected resource or an existing project may be causing ongoing public health harm. Courts are typically asked to issue a preventive or precautionary order in a short timeframe and based upon limited evidence. Some countries create high barriers for obtaining such orders, such as requiring a showing of imminent actual

⁹⁹ Lin and Tuholske 2015; Supreme People's Court of China 2016.

harm before issuing an order.¹⁰⁰ As discussed n Section 5.2.2, most countries require the party seeking such an order to post a security bond that acts as a guarantee that the party is acting in good faith and to compensate the other party if it is wrongfully harmed by the preventive order.¹⁰¹ These bonds can be substantial, which poses an effective bar to many environmental plaintiffs. Thus, one study called the ability to issue a temporary restraining order without a security bond "the most important remedy for sustainability."¹⁰² As a result, in environmental cases some courts reduce the bond amount or do not require a bond. For example, Kenya's Environment and Land Court held that the Kenyan Civil Procedure Rules requirement of furnishing a security when seeking an injunction would not apply in cases for the enforcement of a right to a clean and healthy environment.¹⁰³

Declaratory relief is a somewhat similar remedy. In an action for declaratory relief, the petitioner requests the court or tribunal to state what the law is and what it requires. In these instances, the court gives the claimant legal clarity about an issue, but typically does not require any action by the responding party nor any payment of compensation

103 Fadhila S. Ali v. National Housing Corporation (2012).

or fines. For example, a claimant may ask a court to determine that a particular discharge violates the law or causes harm, without asking for compensation or fines. This remedy allows courts to clarify what the law is without having to commit additional resources to ordering a remedy in a specific instance.

5.4.2 Fines and Other Monetary Penalties

Environmental law relies heavily on monetary fines and penalties to remedy noncompliance. Criminal fines are available in most legal systems for environmental violations, and a growing number of legal systems are providing for civil and administrative money penalties. These cases are usually brought by the state prosecutor, justice ministry, or environmental agency. As noted in Section 5.2.1, some systems enable citizens to bring enforcement actions in the civil courts independently of whether the government has acted or only specifically when the government fails to act.

In order to be effective, fines and penalties should not only punish past illegal behavior, but also deter future illegal behavior.

Many penalties are set at fixed amounts per infraction or set at a maximum amount. If these are set too low, it may be more profitable for parties to continue not to comply. **The fines must be set sufficiently high to both deter and punish illegal behavior.** In the United States, for example, federal criminal penalties for water and waste violations can be as high as US\$250,000 per day of violation and 15 years imprisonment, while air violations can be as high as US\$1 million per day.¹⁰⁴

An effective method for countering this problem is for the money penalty to—at a

¹⁰⁰ See Summers et al. v. Earth Island Institute et al., 555 U.S. 488 (2009) ("To seek injunctive relief, a plaintiff must show that he is under threat of suffering 'injury in fact' that is concrete and particularized; the threat must be actual and imminent, not conjectural or hypothetical; it must be fairly traceable to the challenged action of the defendant; and it must be likely that a favorable judicial decision will prevent or redress the injury.").

¹⁰¹ For example, in Mexico, the *amparo* action can include a temporary preventive order pending the final judicial decision. Under the Amparo Law, the judge can require the plaintiff to post a bond sufficient to compensate the defendant for losses if the amparo remedy is not granted (art. 132). A counter-bond may also be required of the defendant (art. 133).

¹⁰² Pring and Pring 2016, 52.

¹⁰⁴ USEPA 2017a, 2017b, 2017c.

minimum—recapture the economic benefit or profit obtained from any violation. Companies that make the effort to comply with the law should not be at a competitive disadvantage to those who do not comply. Accordingly, when courts are deciding on penalties, statutes or regulations may require them to consider how much money a violator made or saved through the violation. Agencies publish guidance on calculating the economic benefit of noncompliance to help guide enforcement officials and courts in making these calculations. For example, South Australia's penalty policy contains a chapter on how to recoup economic benefit when calculating environmental penalties.¹⁰⁵ Similarly, Step Five of the United Kingdom's Environmental Offences Definitive Guidelines directs that penalties be calculated to "[e]nsure that the combination of financial orders (compensation, confiscation if appropriate, and fine) removes any economic benefit derived from the offending."106 To deter companies from "taking their chances" on a "wait and see" approach to complying with environmental requirements, in general penalty amounts should exceed the compliance costs avoided.

If a violation is proven, penalties can also include the state's expenses of investigation and enforcement and court costs and legal fees of the agency or citizen bringing the charges. In most instances, penalties are paid into the national treasury, not to the enforcing agency. Some countries are directing all or a portion of the penalty payments to the agency that oversees the statute that was violated or to supplemental environmental projects, discussed below. For example, the province of Ontario, Canada, created the Ontario Community Environment Fund, which is funded by penalties collected from environmental violations in local watersheds. Organizations, communities, schools, and

conservation authorities can apply for grants from the Fund to support community-based environmental remediation projects, capacity building to prevent or manage spills, and environmental research, education, and outreach activities.¹⁰⁷ Similarly, fines and penalties collected under the United States Clean Water Act for oil and hazardous substances spills to water are directed to the Oil Spill Liability Trust Fund, which is used to remediate oil spills.¹⁰⁸

Some statutes allow violators to conduct supplemental environmental projects in lieu of or in addition to monetary payments when cases are settled by consent. These are environmentally beneficial actions undertaken by a party that cost as much as or more than the money penalty that would otherwise be assessed. For example, a company that violates an air permit condition could agree to install air pollution control equipment to reduce emissions beyond the amount required by law or to provide health monitoring to nearby communities. Some statutes also require that communities be involved in identification of potential supplemental environmental projects so that the projects benefit the communities harmed by the violation and so that disadvantaged populations have an option to identify supplemental environmental projects that would benefit them.¹⁰⁹

5.4.3 Compensation

Monetary compensation may be awarded in cases where there has been harm to individuals, communities, or private or public

¹⁰⁵ South Australia 2015.

¹⁰⁶ Sentencing Council 2014.

¹⁰⁷ Government of Ontario 2017.

^{108 26} U.S.C. sec. 9509.

¹⁰⁹ *See, e.g.*, California A.B. 1071, 2015–16 Leg., Reg. Sess. (Cal. 2015), sec. 2 (requiring a public solicitation of potential supplemental environmental projects from "disadvantaged communities" before the potential project can be approved).

resources.¹¹⁰ In environmental adjudication, compensation is a common remedy because it can help to "make whole" a person or organization who has suffered harm—that is to say, compensation seeks to replace the loss suffered. Examples of compensable injuries include losses related to health or life, livelihoods, enjoyment of one's property, and the resource itself. The party seeking compensation must prove it was harmed and that the harm was attributable to the party from which compensation is sought. A calculation of the fair money compensation is based on the money it would take to make the harmed parties whole or restore them to where they would have been absent the harm. For injuries to public natural resources, the United States and the European Union have framed compensation claims as restoration plans, with separate components to restore or replace the injured or destroyed resources and ecosystem services and to compensate for the interim losses from the time of injury until the resources and ecosystem services return to their baseline levels.¹¹¹

Compensation can be complex to calculate, particularly if it addresses non-economic or emotional harm or potential future effects. For example, courts have struggled with how to set a value on a human life or on the fear of developing cancer, if a chemical exposure has increased the likelihood a claimant will develop cancer.¹¹²

Courts, legislatures, and agencies have developed innovative policies to monetize these harms in environmental cases and to otherwise provide innovative remedies. For example, after the Bhopal, India, tragedy, the Indian court ordered the government to use settlement proceeds to purchase medical insurance for 100,000 persons who might develop symptoms in the future and encouraged the responsible company to fund construction of a local hospital, which it did.¹¹³ Compensation can be combined with remedial orders; for example, courts have ordered medical monitoring of communities exposed to potentially toxic chemicals and mandated reporting of any health impacts attributable to chemical exposure.¹¹⁴

Monetary compensation is most often called for in a civil claim when a private party or community proves that another party caused harm in which the environment played a major role. For example, if a company polluted a public drinking water system with a solvent, a person who drank the contaminated water and developed cancer could seek monetary compensation. This is distinct from a fine or money penalty for violation of a statute, such as an agency seeking to enforce an environmental law relating to release of solvents to water, which is discussed in Section 5.4.2.

The common law also allows for money payments to be assessed in excess of actual compensation, called "punitive damages," in some instances. As the name implies, punitive damages may be imposed in a private lawsuit to punish the transgressor for extreme misconduct, especially when the actual compensation fails to reflect the nature of the harm or misconduct or fails to provide adequate relief. Punitive damages also seek to deter future misconduct by the transgressor and others.

¹¹⁰ Some common law countries refer to monetary compensation as "money damages"; this term is distinct from the environmental or individual harm or damage that may be the issue in the case. To avoid confusion, this report avoids using the term "damages."

¹¹¹ Jones et al. 2015; Jones and DiPinto 2017.

¹¹² Brändlin and Benzow 2013.

¹¹³ Union Carbide Corporation 2017.

¹¹⁴ See, e.g., <u>http://www.c-8medicalmonitoringprogram.</u> <u>com/index</u>.

5.4.4 Corrective Orders

The ability to remedy past environmental harm is critically important, and monetary compensation is often insufficient to remedy the harm done—especially when fines and other monetary payments to the government go into the nation's treasury, rather than being used to restore the environmental harm. *Courts and tribunals need the power to order parties to take corrective action (such as ordering a party to clean up contamination from a leak of toxic materials) and restorative action (such as returning a damaged ecosystem to its original condition).*

Ordering monetary compensation may not be adequate or desirable in some instances, so courts also rely on corrective orders. Corrective action orders are common in environmental enforcement proceedings. When environmental contamination or destruction of a resource occurs, courts often order the party causing harm to correct the harm caused or to refrain from particular behaviors in the future. This is usually in conjunction with fines and other remedies. For example in India, the National Green Tribunal ordered an interim cessation of unsafe, environmentally harmful "rat hole" mining in the autonomous state of Meghalaya.¹¹⁵ It created a committee, composed mainly of Meghalaya officials, and assigned them the tasks of reporting illegal coal extractions, monitoring the legal removal of already-extracted coal, and recommending better mining guidelines.¹¹⁶ The Tribunal held that miners or transporters caught illegally extracting or transporting coal are liable for royalties paid to the state of Meghalaya,

and that these royalties are to be used for restoration of the environment.¹¹⁷

Restorative actions, by contrast, call for parties to restore the environment to its condition before the harm was inflicted. For example, Rule 5 of the Philippine Rules of Procedure for Environmental Cases allows the court to "require the violator to submit a program of rehabilitation or restoration of the environment, the costs of which shall be borne by the violator...."¹¹⁸ In other countries, courts and agencies can require companies to clean up contaminated areas to remove discharges of toxic materials even if the discharge occurred in the distant past.

Courts may lack the authority to monitor implementation of their corrective orders, which results in an implementation gap in environmental law when oversight of the remedies that a court orders is left to private parties or the government. If the remedy is not implemented, a new proceeding may have to be commenced. Courts in both civil law and common law countries have authority to make sure that their orders are carried out, although such authority may have to be exercised in innovative ways. Some common law countries, such as the Philippines, refer to this oversight authority as a "writ of continuing mandamus" (mandamus is Latin for "we order"). Civil law countries generally have similar judicial power to ensure court orders are carried out. Other countries consider such authority to be inherent in the judicial power to issue remedial orders. Court oversight can be particularly useful in environmental remediation and restoration cases to ensure complete and effective implementation of the remedy. To effectively

¹¹⁷ All Dimasa Students Union Dima Hasao Dist. Committee v. State of Meghalaya & Ors.; Impulse NGO Network v. State of Meghalaya & Ors., National Green Tribunal, India 2015.

¹¹⁸ Supreme Court of the Republic of the Philippines 2010, Rule 5.

¹¹⁵ Strokke 2017. 116 Ibid.

supervise a remedy, a court may appoint a commission or special observer to periodically report back to the court on progress. For example, the Philippine Supreme Court used a continuing mandamus order to create a committee to oversee and report to it on compliance with its prior decision requiring thirteen government agencies to rehabilitate Manila Bay.¹¹⁹ A series of other innovative uses of this remedy in both civil law and common law countries is described in Case Study 5.6.

Courts may be reluctant to use a supervisory order if the legal duty is not sufficiently clear. In one case from the Philippines, the Supreme Court dismissed a petition seeking mandamus because, even though the 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.¹²⁰

Other countries have adopted a broader view of judicial power to ensure that court orders are carried out.¹²¹ In these countries, the power may come from the court's inherent authority in certain cases or it may come from the mandatory language of a statute. In India, the Supreme Court 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 of its officials—to construct the drains and fill up cesspools and other pits of human and industrial waste, notwithstanding that the municipality claimed to be financially

119 Metropolitan Manila Development Authority v. Concerned Residents of Manila Bay 2008. exhausted.¹²² And in an Argentine case, the Supreme Court ordered that the province of Mendoza, together with the province of La Pampa, to reallocate water flow in the Atuel River within 30 days to restore the ecosystem affected by the Los Nihuiles dams.¹²³ The court ordered the two provinces and the national government to submit a work plan allocating the Atuel's waters.

5.4.5 Imprisonment and Probation

In many countries, laws permit only criminal sanctions for environmental violations. This can seriously limit the ability of prosecutors and enforcement agencies to obtain sanctions that are appropriate for the violation. In countries with a range of available remedies, criminal prosecution is generally reserved for cases where it can be shown defendants intended to engage in illegal conduct or were grossly negligent. Thus, it is harder to successfully prosecute violators when seeking criminal remedies rather than civil or administrative remedies.

Criminal penalties tend to carry the highest weight with individual defendants, who can face time in prison, or extended probation undergoing supervision by a court or other agency. Criminal sanctions often have additional impacts, as those convicted of serious crimes may face loss of voting privileges and other civil rights. The social stigma of being a convicted "criminal" can be a

¹²⁰ Metro. Manila Dev. Auth. v. Concerned Residents of Manila Bay, G.R. Nos. 171947-48 (Supreme Court of Philippines, December 18, 2008).

¹²¹ In common law countries, this is referred to as the writ of mandamus.

¹²² Municipal Council, Ratlam v. Vardhichand, No. 1980 AlR 1622, 1981 SCR (1) 97 (Supreme Court of India. 29 July 1980).

¹²³ Corte Suprema de Justicia de la Nación [National Supreme Court of Justice], 243/2014 (50-L), Province of La Pampa v. Province of Mendoza on the Use of Water (Arg.). http://<u>www.cij.gov.ar/</u><u>nota-28698-Conflicto-Río-Atuel--la-Corte-orden-</u><u>-a-lasprovincias-de-La-Pampa-y-Mendoza-la-</u><u>presentación-de-un-programa-deobras-con-la-</u><u>participación-del-Estado-Nacional.html.2017</u>. *See also* Lorenzetti 2018.

Case Study 5.6: Courts Ordering and Overseeing Long-term Remediation in Watersheds

The courts in the following three examples from Colombia, Argentina, and Pakistan each considered cases involving an entire watershed and created unique solutions to supervise the long-term cleanup and restoration of the river systems.

The Colombia Consejo de Estado, the country's highest administrative appeals court, issued a judgment in 2014 against companies, government agencies, and municipalities that caused or failed to prevent the degradation of the Bogotá River watershed.^a The Court developed a remedial plan based on the evidence of technical experts and established requirements for the treatment of wastewater, the control of livestock, and the siting of mines, among other regional activities. To coordinate the rehabilitation of the entire watershed, the Court ordered the creation of a committee and central funding source to monitor and support the completion of the Court's plan to rehabilitate the river.

In 2008, Argentina's Supreme Court issued a ruling in an action filed by residents against private companies, the national government, and the provincial and municipal governments of Buenos Aires asserting that their constitutional right to a healthy environment had been violated by pollution of the Matanza-Riachuelo river basin.^b The Court ordered the river basin authority to oversee the restoration of the river basin's components and the improvement of the local community's quality of life. The plan mandated transparency by requiring the creation of a website to centralize up-to-date information on the plan's execution, and it ordered the authority to establish an emergency health plan to monitor and treat the medical needs of the local population.

In response to a 2012 public interest litigation petition regarding the discharge of untreated municipal and industrial wastewater into the River Ravi, the Green Bench of the Lahore High Court in Pakistan ordered the establishment of the River Ravi Commission to manage the river's restoration.^c The Commission, comprising experts and government and nongovernmental representatives, was given the task of finding local and low-tech solutions for controlling pollution in the River Ravi. The Commission developed a bioremediation project using wetlands to treat wastewater. The Lahore High Court held periodic hearings on the progress of the Commission's work and, in 2015, ordered full-scale implementation of the bioremediation project.^d

a. Sentencia No. 25000-23-000-2001-90479-01(AP), Consejo de Estado (Colombia) 2014.

b. Mendoza, Beatriz Silvia y otros c/ Estado Nacional y otros s/ daños y perjuicios (daños derivados de la contaminación ambiental del Río Matanza - Riachuelo), Corte Suprema de Justicia de la Nacion (Argentina) 2008.

c. W.P. No. 9137/2012, Lahore High Court, 2012.

d. W.P. No. 9137/2012, Lahore High Court, 2015.



substantial deterrent. Corporate officials can be criminally prosecuted for their decisions and other actions, and companies themselves can be convicted of criminal violations. Although a company cannot be imprisoned, it can face heavy sanctions, including debarment from government contracts and even loss of its license to operate, as well as probation supervising its corporate behavior.¹²⁴

The possibility of imprisonment stands as a strong deterrent in environmental law.

While businesses may be able to write off fines and compensation as a "cost of doing business," especially if the amounts are less than the profit gained, the prospect of a corporate official serving prison time can change corporate culture. Probation can also deter noncompliance. As such, it is an important remedy for those who enforce environmental law to have at their disposal. But because it can be difficult to prove criminal cases and because people accused of criminal violations often fight the charges vigorously, civil and administrative powers should also be available.

Courts have developed innovative programs that offer criminal violators a chance to avoid going to prison. For example, violators might be allowed to participate in educational

124 South and Brisman 2013.

or community service programs that teach the environmental and social consequences of what they have done or remedy the harms they have done. The Court of Environment and Agrarian Issues of the State of Amazonas (Brazil) offers a night school for environmental law violators, after which the level of recidivism is reported to be very low.¹²⁵ In one case before the Court, Judge Adalberto Carim Antonio offered a convicted poacher of Amazonian manatees the choice between a prison sentence and a year of service at a manatee rehabilitation center. The defendant elected to volunteer at the center, and emerged as a strong advocate of manatee protection.¹²⁶

Over 100 countries are also experimenting with restorative justice in criminal cases.¹²⁷ With restorative justice, the perpetrator, the victim, and the community come together to address the wounds caused by the crime.¹²⁸ It is critical that these approaches be protective of the most vulnerable parties and not result in further harm. This remedy has been used, for example, in Australia to address harm to a community's cultural resources and illegal removal of trees on private property.¹²⁹

5.4.6 Administrative Enforcement

Increasingly, countries are looking to administrative enforcement mechanisms to avoid the cost and delays inherent in many criminal and civil judicial proceedings. *Administrative enforcement allows agencies to address infractions that are less serious or more routine, usually by using notices of violation, corrective orders, or restorative orders.* Many countries have adopted administrative sanctions for environmental

126 Asian Development Bank 2016.

128 Braithwaite 2002; Zehr 2015.

¹²⁵ Pring and Pring 2016.

¹²⁷ Van Ness 2005.

¹²⁹ See Preston 2011.

violations, including Austria, Belgium, China, Colombia, France, Finland, Germany, Italy, Mexico, the Netherlands, Portugal, Spain, Sweden, the United States, and Viet Nam.¹³⁰

For example, a series of studies determined that a lack of administrative penalties caused some authorities of the United Kingdom not to bring charges for relatively minor infractions for which criminal sanctions were too strict (termed a "compliance deficit") and others to seek criminal sanctions for violations that were not criminal in nature (termed "disproportionate enforcement").¹³¹ To address the situation, the United Kingdom enacted the Regulatory and Enforcement Sanctions Act to create administrative remedies with guicker and simpler proceedings that reduce the burden on enforcement authorities and allow them to focus on more egregious cases.132

For administrative actions that are fairly minor, there may be no appeal of the agency's enforcement action. Most countries, though, provide that administrative actions can be appealed to and reviewed by an independent administrative tribunal or judicial court to ensure parties have redress in case an agency is acting unfairly.

In sum, effective responses to environmental disputes and violations are facilitated when adjudicators are empowered with a variety of remedies they can tailor to address the case at issue. Countries are creating new administrative, civil, and criminal remedies that are proportionate, fair, and efficient, and that help ensure delivery of justice and strengthen environmental rule of law.

5.5 Opportunities and Recommendations

States have made great strides in creating fair and innovative adjudication practices to deliver justice in environmental matters. However, court and tribunal proceedings may not deliver justice if there are barriers to accessing the forum, lack of environmental expertise among judges, delays in handing down decisions, and insufficient remedies to address the harms and violations at issue. While progress has been made, many opportunities exist to expand and deepen these innovations to help provide justice, give voice to underserved communities, hold government accountable, and establish a strong compliance ethic.

Creating specialized environmental courts and tribunals may allow broader access to courts and more efficient and meaningful environmental adjudication. These specialized venues can reduce costs, offer technical and legal expertise and assistance, and speed resolution of disputes that might fester into broader social conflict. With over 40 countries using these specialized fora at the national level and dozens more at the subnational or regional level, many case studies and best practices are available to consult.

Cumbersome, undifferentiated court procedures can cause minor offenses to consume as much time and resources as major infractions. *Administrative enforcement processes can be much more efficient at handling minor offenses.* Use of administrative enforcement orders, administrative consent orders, administrative tribunals, and modest fines can speed the resolution of less serious infractions. This can reduce burdens on courts and other tribunals, freeing them to focus on more serious violations.

Without swift and fair redress for environmental harm and enforcement against

¹³⁰ Fourie 2009, 7; Vella 2016.

¹³¹ Fourie 2009, 9.

¹³² Ibid.; Macrory 2014.

environmental law breakers, environmental rule of law cannot take firm root. A government can make clear its commitment to environmental law and related rights by **taking swift and transparent action against environmental infractions**. By publicizing this action, a government can encourage a culture of compliance and educate the public about the actions it is taking on the public's behalf, thus increasing confidence in government and government institutions.

With technological advances, *making court decisions publicly available* is easier and less costly than ever. Decisions are proof that environmental harms can be and are, in fact, actually being redressed, and putting them in written form made freely available helps assure consistent and transparent justice. Public websites for distribution of court decisions are being created in many countries. Transcriptions of oral decisions can also be made available, ideally for little or no cost. Making court decisions widely publicly available helps set norms of behavior among the regulated community and reasonable expectations of justice in the public.

Investing in environmental education for the bar and judiciary is critical so they can effectively handle complex, often unfamiliar environmental claims and disputes. Raising environmental awareness in primary and secondary schools is an important start by ensuring future citizens understand their rights and responsibilities related to the environment, and to spark young people's interest in becoming environmental professionals. Law schools, scientific schools, government agencies, nongovernmental organizations, and lawyers' associations can work together to raise awareness of environmental laws and the attendant remedies and duties that flow from them. Investing in a robust judicial education program ensures a judiciary ready to implement these laws and defend these rights. **Tailoring legal remedies to the harm and benefit derived from the harm** both deters misconduct and instills a sense of fairness in the environmental rule of law in general. Many courts handling environmental cases have developed innovative remedies that go beyond mere punitive measures to seek to restore harmed resources and restore relationships between those who do harm and those harmed. Environmental disputes offer the opportunity to use innovative processes and remedies to facilitate dialogue and reduce conflict, thereby strengthening societies and the environment upon which they depend.

Successful implementation of environmental law depends on the ability to quickly and efficiently resolve environmental disputes and punish environmental violations. Providing environmental adjudicators and enforcers with the tools that allow them to respond to environmental matters flexibly, transparently, and meaningfully is a critical building block of environmental rule of law.







Engaging diverse actors is key to strengthening environmental rule of law. For more information, see Section 6.2 (p.229).









Environmental rule of law is still emerging and evolving. Twenty-five years ago, the focus of most countries was on developing their environmental laws, adopting implementing regulations, creating and empowering their institutions, and building capacity—in short, establishing the norms and institutions necessary for environmental rule of law. While law-making and capacitybuilding efforts continue,¹ these norms and institutions are now well-established. They are not, however, consistently applied, complied with, or enforced. Environmental rule of law seeks to address the implementation gap in both developed and developing nations.

This first global report on environmental rule of law has five objectives. First, it seeks to explore the meaning and importance of environmental rule of law. Second, it highlights trends in environmental rule of law, often providing an empirical foundation on these trends for the first time anywhere. Third, it illustrates specific approaches that countries, domestic stakeholders, and international partners have been adopting to improve environmental rule of law in particular ways. Fourth, it provides a benchmark against which to assess future developments. Finally, it sets forth priority recommendations for measures that countries and others can pursue to continue progress on environmental rule of law.

This chapter highlights four key opportunities for improving environmental rule of law: capitalizing on linkages with the Sustainable Development Goals; engaging diverse actors; conducting a regular assessment of the environmental rule of law; and piloting approaches to improve environmental rule of law. The chapter ends with a brief consideration of the way forward.

There are still some areas where existing environmental laws still frequently are lacking, for example with respect to noise, toxic chemicals, and drivers of climate change.

6.1 Environmental Rule of Law and the Sustainable Development Goals

Adopted in 2015, the UN Sustainable Development Goals include 17 goals and 169 targets developed by UN Member States, in a broadly participatory process that included extensive input from Major Groups and other civil society stakeholders.² They guide the 2030 Sustainable Development Agenda.³ In practice, the Sustainable Development Goals are critically important to development initiatives, focusing political attention and financial resources on meeting the specific targets and timetables articulated in the Sustainable Development Goals.



Environmental rule of law and the Sustainable Development Goals are mutually reinforcing. The Sustainable Development Goals promote norms and a framework that are essential to environmental rule of law; meanwhile, many of the Goals are only achievable under conditions of effective environmental rule of law. Indeed, environmental rule of law is essential to almost all of the goals and many of the targets. Finally, progress toward several of these Sustainable Development Goals also provides opportunities to strengthen environmental rule of law. Figure 6.1 briefly shows many of these linkages, including with 16 of the 17 Goals and 76 of the 169 targets.

The Sustainable Development Goal with the strongest linkages to environmental rule of law is Goal 16 (Peace, Justice, and Strong Institutions). The Millennium Development Goals—the predecessor to the Sustainable Development Goals—did not directly address governance. Instead, it focused on eight purely sector-specific goals, including poverty, education, child mortality, and environmental sustainability, among others.⁴ Fifteen years of pursuing the Millennium Development Goals highlighted, though, that development is not just a technical issue; it is at its heart a governance issue. Laws, institutions, capacity, and practice have a critical effect on whether and to what extent countries are successful in meeting their goals. As a result, the Sustainable Development Goals added governance as a cross-cutting goal with a strong emphasis on implementation.⁵

Goal 16 is a cross-cutting goal that is essential to meeting other Sustainable Development Goals.⁶ This Goal sets a priority on "provid[ing] access to justice for all and build[ing] effective, accountable and inclusive institutions at all levels." Specific targets include, among others, increasing rule of law and access to justice, reducing corruption and bribery, ensuring transparency and participation, and protecting rights.⁷ These are both general goals, and means to achieving other specific goals.

² UNGA 2015.

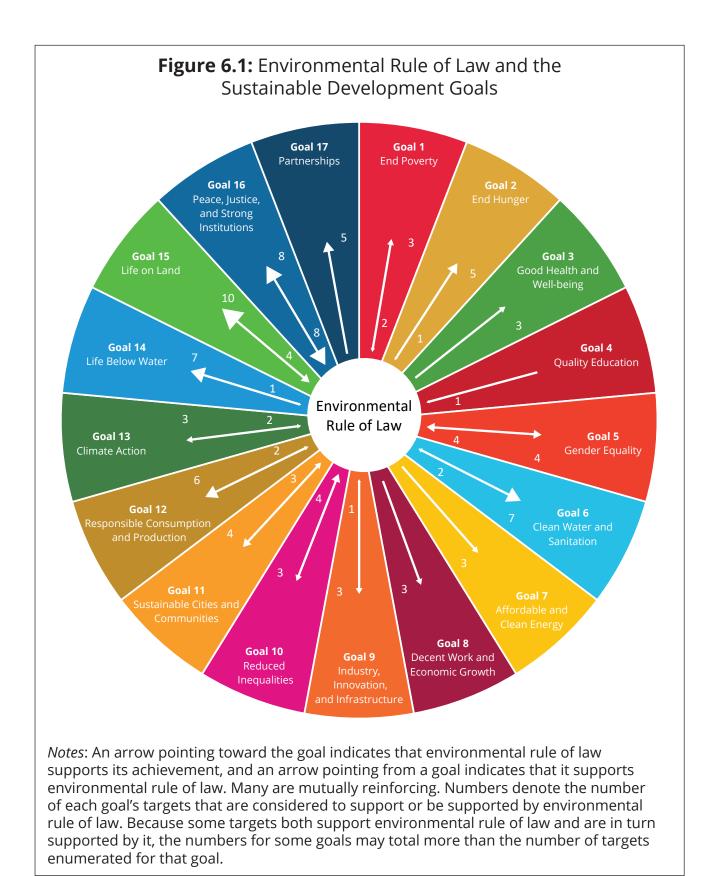
³ Ibid.

⁴ UNGA 2000.

⁵ Sachs 2012; Fukuda-Parr 2016.

⁶ Stafford-Smith et al. 2017.

⁷ Khan, Boisson de Chazournes, and Davis 2016.



Environmental rule of law is important, if not crucial, for achieving almost all of the Sustainable Development Goals and many of the targets. For example, in order to "substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination" (Target 3.9), it is necessary to adhere to permitting and environmental impact assessment processes and enforce environmental quality standards, as well as promote technology transfer and build capacity. To ensure that "women [have] equal rights to economic resources" (Target 5.a), it is necessary to adopt and enforce nondiscriminatory rights to land, forests, and other resources. And protecting and restoring water-related ecosystems (Target 6.5) requires enacting, implementing, and enforcing appropriate legal frameworks.

Goal 14 (Life below Water) has many direct and indirect links to environmental rule of law. Calling for science-based fishery management plans (Target 14.4) highlights one of the defining elements of environmental rule of law: binding rules that take into account ecological and biological factors, such as the maximum sustainable yield of a species of fish. Additionally, regulating overfishing and eliminating illegal fishing (Target 14.4) requires strong environmental rule of law, which provides a framework for regulations and enforcement. The consistent application of penalties commensurate with the infraction and eliminating certain subsidies (Target 14.6)) can dissuade violations, and eliminating safe havens and financial loopholes can diminish incentives for the proliferation of illegal activity beyond illegal fishing.8

Many core components of environmental rule of law correspond with targets defined in the Sustainable Development Goals. For example, Targets 9.c, 12.8, and 16.10 seek to ensure that people have access to information. Target 16.10 also "protect[s] fundamental freedoms, in accordance with national legislation and international agreements." Target 16.a seeks to strengthen national institutions and their capacity. Other targets focus on ensuring access to land and other natural resources (2.3), combatting poaching and illegal wildlife trade (15.7 and 15.c), rule of law and equal access to justice (16.3), combatting organized crime (16.4), substantially reducing corruption and bribery (16.5), developing effective, accountable, and transparent institutions (16.6), and ensuring responsive, inclusive, participatory, and representative decision making at all levels (16.7). A number of targets address inequality and non-discrimination, including 1.4, 10.2, 10.3, 10.4, and 16.b, particularly with respect to gender (5.1, 5.5, 5.a, and 5.b).

One of the primary challenges of the Sustainable Development Goals—especially as they relate to the environmental rule of law—is a focus on measureable outcomes, rather than on inputs or actions. Discreet, measureable targets make it easier to know where there is progress and where there are shortcomings. But it can be difficult to objectively measure many aspects of environmental rule of law, including the quality of laws, the effectiveness of institutions, compliance rates, levels of corruption, or the respect for rights. Another challenge is the fact that treating effective governance as an explicit objective of sustainable development is relatively recent,⁹ so there is less experience developing and utilizing indicators of governance (including those related to environmental rule of law). However, there is broad consensus around its importance for sustainable development, and, as discussed

⁹ While governance is explicitly addressed in Goal 16 of the 2015 Sustainable Development Goals, it was not a focus of the 2000 Millennium Development Goals.

in Section 6.3, there has been substantial progress made in developing indicators for many of the elements. These tend to utilize a combination of objective metrics and broadbased surveys of perception.

Environmental rule of law provides an important entry point for considering how to govern development so that it is sustainable. It is clear that many of the Sustainable Development Goals, even those that do not mention the environment explicitly, will only be met if there is substantial progress on environmental rule of law, and that there is substantial congruity between Sustainable Development Goals and targets and the ingredients of environmental rule of law. This means that as countries and partners pursue the 2030 Agenda for Sustainable Development, they need to mainstream consideration of environmental rule of law into their programming.

6.2 Engaging Diverse Actors

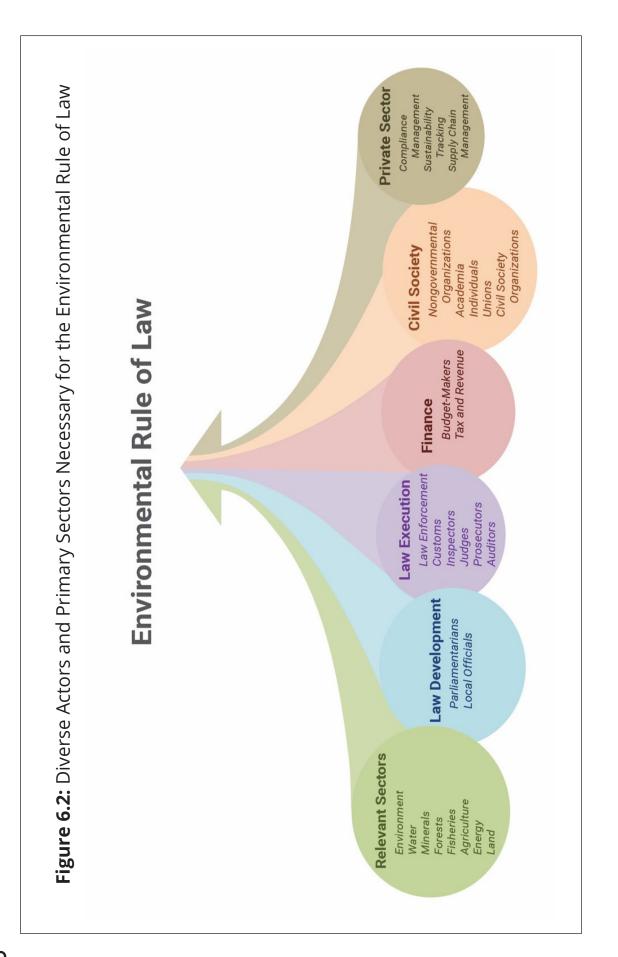
Environmental rule of law is a broad topic with components that spread across a wide arena of sectors, jurisdictions, disciplines, and individuals. This breadth and complexity constitutes one of the challenges of strengthening the environmental rule of law, even where environmental rule of law, even where environmental rule of law is recognized as important. Experience has shown, though, that it is not only possible to bring these diverse actors together, it is both essential and determinative of success in achieving environmental and social objectives.

Case studies and analyses throughout this Report emphasize the need for coordinated efforts from a diverse set of actors that perform different roles. These actors include both leaders and technicians in law- and policy-making, budgeting, permitting and licensing, inspection, enforcement, auditing, prosecution and advocacy, and adjudication. The actors include those governing and managing a specific environmental component or natural resource, for example those in ministries of environment, water, forests, minerals, fisheries, land, and agriculture, among others.¹⁰ Moreover, other ministries and offices that may have limited environmental expertise are often crucial, including those governing customs, law enforcement, prosecution, and revenues. These are only a sampling of the most relevant national governmental authorities. In addition, there are authorities at the subnational level (provinces/states, districts/ counties, and localities/municipalities), as well as indigenous peoples (sometimes referred to as tribes or First Nations). Civil society is also important, comprising nongovernmental organizations, local civil society organizations, academia, unions, international partners, and individuals. The private sector is also crucial, not just as it is an important component of the regulated community, but due to the recent developments in private environmental governance that reinforce environmental rule of law.11 And intergovernmental bodiesincluding the United Nations and its various agencies, human rights institutions, and trade organizations, among others—often play a critical role in building capacity, providing technical assistance, and facilitating normative development. Indeed, where environmental rule of law is weak, private environmental governance can provide a complementary means to make progress on environmental and social standards, even as improving environmental rule of law remains essential. Figure 6.2 illustrates how the diverse actors and primary sectors come together to catalyze and support the environmental rule of law.

¹⁰ There is a substantial body of experience and literature on governing the intersections between sectors, such as the so-called "Water-Energy-Food Nexus". *See, e.g.,* Biggs et al. 2015; Bizikova et al. 2013; Ringler, Bhaduri, and Lawford 2013.

¹¹ Cashore 2002; Vandenbergh 2013.





The range of actors who have a stake in the intended outcomes of strong environmental rule of law and who can influence the process of attaining those goals reaches beyond those who are directly involved in environment and natural resource sectors. In this context, five key areas—in addition to those highlighted in Figure 6.2—warrant particular consideration: green growth, peace and security, displacement, gender, and governance.

While *green growth* tends to focus on incentive-based and market-based approaches,¹² environmental rule of law is essential to green growth as it ensures that the rules are clear, fair, and evenly applied, discourages rule violations, and removes incentives for practices that may result in negative environmental and social impacts.¹³ As such, environmental rule of law promotes a more fair and stable investment climate that can foster economic development that is both sustainable and equitable.¹⁴ This favorable investment climate is also essential for innovation necessary to research, develop, and deploy new technologies and solutions.¹⁵

Linking environmental rule of law to green growth, then, entails engaging new actors whose mandates and objectives focus on economic development and finance, rather than environment or rule of law per se. These actors include different governmental ministries and offices, nongovernmental organizations and international organizations involved in economic development at various scales, and the private sector (including banks and other financial institutions).¹⁶ Already, for example, the Green Growth Knowledge Platform has developed a working paper

- 13 Damania, Fredriksson, and Mani 2003.
- 14 Castiglione, Infante, and Smirnova 2015.
- 15 The Global Commission on the Economy and Climate 2014.
- 16 Hauffler 2009.

assessing data available to track progress on environmental rule of law.¹⁷

A second important set of actors for environmental rule of law are those working on *peace and security*. Environmental



rule of law is linked to peace and security in many ways: environmental rule of law supports peace and security, and vice versa. Before, during, and after conflict. conditions of weak environmental rule of law enable illicit, and often harmful, exploitation of natural resources. This can allow organized crime to flourish and undermine stability, while also having negative environmental consequences.¹⁸ Strengthening environmental rule of law—including a sound legal framework, institutional capacity, and functional mechanisms for peacefully resolving disputes—is an important means to prevent or mitigate the effects of the resource curse and address grievances that could

¹² OECD 2012.

¹⁷ Green Growth and the Law Working Group 2018.

¹⁸ UNEP and INTERPOL 2016.

escalate to violence, and thus a priority for conflict prevention.¹⁹ During armed conflict, illegal extraction of minerals, timber, and other natural resources often proliferates, often benefitting rebels and criminal groups.²⁰ And after conflict, top priorities for postconflict recovery are establishing peace and security (for example, through peacekeeping; disarmament, demobilization, and reintegration;²¹ and security sector reform); reestablishing livelihoods; and transforming a society defined by rule of gun to one defined by rule of law. These are frequently linked, for example, when trying to ensure that excombatants and security forces do not plunder (or continue to plunder) natural resources.22

Engaging actors working on peace and security—including military, police, peacekeepers, and other domestic and international actors-benefits both environmental rule of law and in turn peace and security actors. Already there have been some initial efforts along these lines, for example, between UN Environment and the UN Department of Political Affairs (responsible for helping to resolve armed conflict),²³ between UN Environment and the **UN Department of Peacekeeping Operations** and Department of Field Support,²⁴ between UN Environment and the UN Peacebuilding Commission and UN Peacebuilding Support Office,²⁵ and between UN Environment and Interpol.²⁶ These partnerships reflect and draw upon numerous on-the-ground partnerships. While these partnerships have not focused on environmental rule

- 22 Ravier et al. 2016; Waleij 2016.
- 23 UNDPA and UNEP 2015.
- 24 UNEP 2012.
- 25 See Lehtonen 2016.
- 26 UNEP and INTERPOL 2016.



of law as such, they often emphasize key elements of environmental rule of law, such as strengthening environmental policies, institutions, capacities, and will to implement; and the existing relationships between the peace and security sector and the environmental sector provide an established platform for engagement on environmental rule of law.

Another important set of actors are those who work on **displacement**. Common causes of displacement include disasters, instability and conflict, environmental degradation, and property seizure. Weak rule of law can drive and sustain displacement: conditions of weak environmental rule of law can result in displacement (e.g., via land grabbing or land degradation); they can also impede return. At the same time, displacement can complicate efforts to maintain environmental rule of law. as displaced persons often are not aware of local laws and adopt survival strategies that generally do not consider environmental law (such as rapid felling of trees for shelter and fuelwood, or a demand on water resources exceeding carrying capacity). In addition to the shared dynamics, both environmental rule of law and displacement emphasize the importance of rights-based approaches.

See discussion in Sections 1.1.3 and 3.2.4; see also Le 19 Billon 2005; Hauffler 2009.

²⁰ Radics and Bruch 2017; UNEP and INTERPOL 2016. 21 UNDPO 2010, 20.

The primary actors working on displacement are humanitarian organizations, including intergovernmental bodies, bilateral organizations, and nongovernmental organizations. These organizations are likely to be most interested in strengthening the environmental rule of law when they perceive it as a means to prevent displacement, to facilitate return, or to support migration with dignity.²⁷

It is important to engage actors working on *gender*, both because they are working on many issues related to environmental rule of law and because they often have additional perspectives and insights that can help advance environmental rule of law both with respect to women and girls as well as more broadly. Women are less likely to have rights to land and resources than men.²⁸ They are often more affected by pollution.²⁹ And they are less likely to have a voice in decisions or to have their rights (to the extent they exist on paper) enforced.³⁰ Moreover, women disproportionately suffer sexual violence when seeking water, fuelwood, and other resources.³¹ Women are also important engines of economic development.³² As such, it is essential to consider environmental rule of law through a gender lens.

Important actors working on gender include UN Women, UN Development Programme, UN Environment, and the UN Peacebuilding Support Office (which have a joint program on women, natural resources, and peace). Many nongovernmental organizations work on gender. Some governments are international leaders on the topic (for example, Sweden has a self-declared feminist foreign policy).

29 Duflo, Greenstone, and Hanna 2008.

32 Duflo 2012; Boserup, Tan, and Toulmin 2007.

Finally, organizations and individuals working on governance constitute an important group of actors to engage in environmental peacebuilding. While environmental rule of law has some characteristics that make it unique from rule of law and governance more broadly,³³ their objectives are substantially aligned. Moreover, governance dynamics and programming often play out in the environmental context. Efforts to fight corruption often address timber, mineral, and other natural resource concessions. Efforts to protect rights require protection of environmental defenders and land rights.³⁴ Efforts to advance transparent, participatory, and accountable government often have particular relevance in the environmental context.³⁵ And efforts to decentralize political power, even when not targeting natural resource sectors, can influence the institutions that are charged with governing natural resources and the environment.³⁶

Organizations working on governance include intergovernmental organizations (such as the World Bank and the UN Development Programme), regional bodies (such as the Organization of American States and the African Union, as well as regional development banks), bilateral entities, national organizations, and nongovernmental organizations. They address a wide range of issues, including elections and representation, budgeting, corruption, judicial independence, checks and balances, public administration, and political economy.

Coordination among these actors and sectors is challenging due to the varying priorities, procedures, and operating assumptions. Politics and "turf" can further complicate coordination. Moreover, international trade and demand for resources can provide

²⁷ Cf. McNamara 2015.

²⁸ Deere and León 2001; Meinzen-Dick et al. 1997; Agarwal 1994.

³⁰ Quisumbing and Pandolfelli 2010; UNEP et al. 2013.

³¹ UNEP et al. 2013.

³³ *See* Section 1.1.3, above.

³⁴ See Chapter 5.

³⁵ See Chapter 3.

³⁶ *See* Chapter 2.3.3.

markets that drive illegal trade in timber, wildlife, and minerals,³⁷ adding sovereignty to the challenges of coordinating to improve environmental rule of law.

There is a growing body of experience and approaches that highlights ways that coordination can improve decisions, implementation, enforcement, and effectiveness—in short, the environmental rule of law.³⁸ Experience has shown that political will is perhaps the most important consideration determining whether coordination will be successful. The different organizations and individuals need to understand that in order to accomplish their particular goals (whether it is sustained and sustainable economic development, peace and security, good governance, or another goal), there needs to be effective environmental rule of law.

In practice, this recognition means that these diverse actors with diverse objectives recognize the importance of environmental rule of law. They may engage more with certain aspects than others, as is most relevant to them. Environmental rule of law should be considered early in program and project design, with considerations of whether to address environmental rule of law concerns through internal staffing and processes or through engagement with entities specializing in environmental rule of law.

6.3 Regular Assessment of the Environmental Rule of Law

As highlighted throughout this Report, there have been substantial developments in environmental rule of law over the last 25 years. Countries have adopted environmental laws and created institutions. They have engaged the public, recognized environment-related rights, and sought to improve mechanisms for peacefully resolving environmental disputes. There have also been some negative developments that undermine environmental rule of law, most notably the recent trend to target environmental defenders and nongovernmental organizations more generally.

Environmental rule of law continues to be a dynamic space, with ongoing innovations, learning, and development.

A key opportunity to strengthen environmental rule of law is conducting a regular global assessment of the environmental rule of law. Such an assessment is critical for understanding trends (including where progress is slow or there has been backsliding), identifying innovations, and sharing learning about which approaches are most effective. It also helps to periodically focus public attention and maintain political will. And analysis of the trends can improve understanding of the dynamics and effectiveness of particular approaches: for example, how specific legal, institutional, and cultural conditions influence whether a particular approach will be successful, or how particular approaches affect environmental outcomes.

In order to be able to draw lessons about both positive and negative outcomes, it is *necessary to utilize a set of consistent indicators that allow for comparison and track progress nationally and globally*. Box 6.1 presents a proposed indicator framework.

The structure of this indicator framework builds on the UN General Assembly's Declaration 67/1 on the Rule of Law³⁹ and seven principles of environmental rule of law

³⁷ UNEP and Interpol 2016.

³⁸ See Section 2.3.

³⁹ UNGA 2012.

Box 6.1: Indicator Framework for Environmental Rule of Law

Contextual Factors

- Demography (distribution of wealth; population density, age structure, urban/rural; education/literacy; gender equity)
- Economy (contribution of natural resource/extractive sector to the state economy; per capita income; evenness of development)
- Politics (fragility; corruption perception; rule of law generally)
- Legal System (type; judicial independence; respect for contracts and property rights)

Laws & Institutions

- Coverage of laws (national environmental laws covering relevant environmental issues)
- Procedural mechanisms (transparency and access to information, public participation, independent review and oversight of implementation measures)
- Right to a healthy environment (explicitly recognized in the constitution, held by a court to be implicity in other constitutional rights, or guaranteed by legislation)
- Rights of free association and free speech (constitutional)
- Right of nondiscrimination (constitutional)
- Rights of marginalized populations (indigenous peoples; women; other)
- Legal pluralism (recognition of customary norms governing natural resources)
- Anti-corruption measures (covering the environmental context)

Implementation

- Information collection, management, and use
- Permits, licenses, and concessions
- Criteria for implementation of environmental law
- Enforcement (number of violations trafficking, illegal pollution; number of inspections per capita or per regulated entity; number of administrative/civil/criminal cases brought; number of convictions/violations corrected; total fines and prison terms)
- Environmental auditing and institutional review mechanisms
- Corruption (in the control of natural resources/concessions; in management of natural resource revenues; in the enforcement process)

Civic Engagement

- Access to information (on laws/regulations/judicial decisions; on the state of the environment; on emission data/reports/audits; on natural resource concessions and revenues; media)
- Public participation (in developing laws and regulations; in permitting/licensing/awarding concessions; in environmental impact assessment; community-based natural resource management; in monitoring and enforcement)
- Environmental defenders (number of land or environmental defenders attacked/killed; number of attacks/murders prosecuted and convicted)

Dispute Resolution and Access to Justice

- Effective dispute resolution bodies (courts and tribunals, administrative environmental tribunals, alternative dispute resolution, customary courts)
- Access to justice (standing; costs; geographic accessibility; timeliness; availability of counsel and advocacy nongovernmental organizations)
- Remedies

Environmental Outcomes and Current Status

- Environmental health
- Environmental compliance by sector
- Natural resource stewardship

articulated in the Issue Brief on Environmental Rule of Law prepared by UN Environment and its Advisory Council for Environmental Justice.⁴⁰ A number of the proposed indicators are aligned with the Sustainable Development Goals and associated targets. The indicator framework is further informed by lessons highlighted in this Report.

The indicator framework starts with some contextual factors such as demographic, economic, political, and general legal dimensions of the country. These contextual factors can be important when countries set goals, when making comparisons across countries, and when evaluating the appropriateness and effectiveness of particular approaches. The indicator framework then focuses on laws and institutions that countries have established (including recognition of various rights);⁴¹ implementation measures; civic engagement; and dispute resolution and access to justice. These four categories essentially reflect and reformulate the considerations reflected in this Report and in the Issue Brief. The final proposed category—environmental outcomes and current status—is important in evaluating the effectiveness of environmental laws and of environmental rule of law efforts. If there is good compliance but public health still suffers, then it may be necessary to adjust the underlying standards. Conversely, if the underlying standards are solid, but compliance is weak or uneven, greater investment in needed in compliance assurance and enforcement. In many circumstances, efforts will be needed on both fronts.

Already, numerous initiatives exist for collecting much of the data that is necessary for the indicator framework proposed in Box 6.1.42 These initiatives have their relative strengths and limitations. Some existing initiatives such as the Environmental Democracy Index (led by the World Resources Institute) and the Enforcing Contracts component of the World Bank's Ease of Doing Business Index focus on objective elements of the pillars of environmental rule of law.⁴³ However, not all elements of the environmental rule of law are easily amenable to objective study. Thus, other indices evaluate perception-based indicators. These include, for example, the Corruption Perception Index (by Transparency International),⁴⁴ which ranks countries and territories by perceptions of corruption in the public sector, and the Rule of Law Index (World Justice Project),⁴⁵ which includes certain indicators measured through a general population poll. Finally, some indices or indicators provide valuable, comparable insights into the context of a particular country, which is critical to understand due to the relevance of various demographic, economic, political and legal factors in influencing the state of environmental rule of law. One example is the Human Development Index (of the UN Development Programme),⁴⁶ which consolidates indices representing key dimensions of standard of living, knowledge, and longevity and health.

Box 6.2 maps the existing data sets and indices against proposed indicator categories, illustrating where there is already good (in quality and breadth) data being collected, where there is some data being collected,

⁴⁰ UNEP 2015; see also Fulton and Benjamin 2011.

⁴¹ For a review of legal indicators, including those related to the environment, see Prieur 2018.

⁴² A table highlighting the various initiatives is in Annex III.

⁴³ See <u>http://www.environmentaldemocracyindex.org/</u> and <u>http://www.doingbusiness.org/data/exploretop-</u> ics/enforcing-contracts/what-measured.

⁴⁴ *See* <u>https://www.transparency.org/research/cpi/</u><u>overview</u>.

⁴⁵ *See* <u>https://worldjusticeproject.org/our-work/wjp-</u> <u>rule-law-index</u>.

⁴⁶ *See* <u>http://hdr.undp.org/en/content/human-devel-opment-index-hdi</u>.

and where there are significant data gaps. In some cases, a particular data set or index has data relevant to multiple indicators; in these instances, the dataset or index is denoted each place where it has relevant data.

There are a few considerations that will need to be addressed in order for the regular assessment to be completed. It will be necessary to validate and finalize the indicator framework and the specific indicators. Part of the consideration of which indicators should be included in the final framework will depend on the data. It is necessary to determine which sources of data are deemed suitable and acceptable and how to address the existing data gaps (whether to reconstruct or fill in the data, whether to acknowledge the gaps, whether to allow different methodologies for different countries, or whether to dispense with the indicator). Where perception surveying is used, there may be value in adding as an important target community private sector entities doing business in multiple jurisdictions. Multinational companies often have an on-the-ground perspective on what is working in practice, heightened by a competitive interest in a level regulatory playing field that encourages common internalization of environmental protection costs across the regulated community. They are, in a sense, interested and informed recipients of the distributed fairness that flows from environmental rule of law, and therefore a promising source of useful data. It is also necessary to determine the scope of the global assessment. This Report has taken a broad view of "environment" including ecosystems, natural resources, and pollution.

In truth, though, these are details (and can be resolved through consultation and deliberation), and should not affect the decision about whether to conduct the assessment. The best route forward is likely to focus on a few core sectors and indicators, work with partners to improve the breadth and quality of the data, and strategically fill in geographic or substantive gaps in the data.

Box 6.2 highlights that there has been significant progress and that there are significant data gaps in understanding which countries are taking what measures on environmental rule of law, and what the effects of those measures are. Historically, this is a data-poor environment, but that is changing. Remote sensing and emerging low-cost sensor technology, combined with machine learning and blockchain technology, promise to dramatically improve assessment of some of these parameters.⁴⁷ To effectively track progress, it will be necessary to engage diverse actors in establishing a common platform (indicators, methodology, etc.) for the assessment.

6.4 Pilot Testing of Approaches

In many instances, there are difficulties in implementing new laws that are common to bureaucracies. Government staff and management are often cautious about being the first to approve a new type of environmental permit, to sign off on community registration of lands, or other measures that may be provided (or even required) by the law.

One way to overcome this institutional inertia is to **share experiences from other jurisdictions**. Familiarity with various approaches and experiences can make it easier for people to take the measures they want to.⁴⁸ Indeed, sharing of judicial opinions and thinking from around the world has

⁴⁷ Paddock and Wentz 2014; Cracknell 2017; Glicksman, Markell, and Monteleoni 2017; Chapron 2017; Düdder and Ross 2017.

⁴⁸ UNEP 2006.

6. Future Directions

Box 6.2: Coverage of Environmental Rule of Law Indicator Framework Based on Existing Data

Indicator category	Indices/data sets (countries covered)	Notes on coverage
Contextual factors (Demography; economy; politics; legal system)	<u>Freedom in the World Index</u> (195 countries + 14 territories)	 + Configuration of political & legal systems well covered - Demographics & economies not well covered - Indicators listed largely qualitative/comparative, not quantitative
	<u>Governance Indicators</u> (Over 200 countries + territories)	
	Democracy Index (167 countries)	
	Rule of Law Index (113 countries)	
	Social Institutions and Gender Index (160 countries)	
	Human Freedom Index (159 countries)	
	Corruption Perception Index (180 countries)	
Laws & institutions	Human Freedom Index (159 countries)	 + Rights of free speech, association, non-discrimination well covered - Only Environmental Democracy Index addresses environmental laws, and relatively fewer countries
(Coverage of laws; rights; legal pluralism)	Freedom of Speech (38 countries)	
	<u>Freedom in the World Index</u> (195 countries + 14 territories)	
	Rule of Law Index (113 countries)	
	Environmental Democracy Index (70 countries)	
		- No statistics on right to healthy environment
Implementation (Information; licenses and concessions; criteria; enforcement; auditing; corruption)	Corruption Perception Index (180 countries)	 Resource Governance Index deals only with oil, gas and mining, in select countries None of these datasets provide statistics on environmental compliance and enforcement or deal with environmental auditing Limited data for permits/ licensing, and on corruption in natural resource sectors
	Resource Governance Index (81 countries)	
	Rule of Law Index (113 countries)	
	Environmental Democracy Index (70 countries)	
	World Justice Project Environmental Rule of Law Index (5 countries)	
<i>Civic engagement</i> (Access to information; public participation; environmental defenders)	Environmental Democracy Index (70 countries)	 + Environmental Democracy Index most comprehensive in assessing status of environmental information, participation, and access to justice, but lower number of countries covered - No statistics on persecution
	<u>Freedom of the Press</u> (199 countries and territories)	
	World Justice Project Environmental Rule of Law Index (5 countries)	
		of or violence against environmental defenders

Indicator category	Indices/data sets (countries covered)	Notes on coverage
Dispute resolution and access to justice	Justice Index (1, the United States)	+ Environmental Democracy Index most comprehensive, limited by number of countries
(Effective dispute resolution bodies; access to justice; remedies)	Enforcing Contracts (190 countries)	
	Environmental Democracy Index (70 countries)	
	World Justice Project Environmental Rule of Law Index (5 countries)	
Environmental outcomes & current status (Environmental health; environmental compliance by sector)	Environmental Performance Index (180 countries)	- No data on compliance by sector
	Environmental Policy Stringency (34 countries – OECD members)	
	Environmental Democracy Index (70 countries)	
Coverage key:		
Strong data	Some data	Insufficient data

been a hallmark of judicial capacity building.⁴⁹ And networks such as the International Network for Environmental Compliance and Enforcement and the European Union Network for the Implementation and Enforcement of Environmental Law are important in sharing experiences. Similarly, handbooks and guidance rooted in other countries' experiences can be useful.⁵⁰

Another important way to overcome institutional inertia is to *pilot test the approach before scaling it up*. This entails a small-scale trial that allows observers to identify problems as well as positive outcomes and lessons from a novel approach to dealing with specified issues relating to environmental rule of law.⁵¹ This may be done purely domestically, or it may benefit from bilateral or multilateral assistance. Pilot testing helps to work through the details of how the approach should work, with the option of revising the approach before scaling it up. It also has the benefits of raising awareness of the regulated community, government, and civil society alike, and gauging their responses. Once an

approach has been tested (and revised as appropriate), it is often possible to scale up the approach with less resistance.

Pilot testing has been used in diverse settings. In the late 1990s, the U.S. Environmental Protection Agency worked with Ukraine's Ministry of Environmental Protection and Nuclear Safety to pilot test an approach of introducing a participatory approach for environmental impact assessment into Ukraine's existing *expertiza* law (which historically had not engaged the public in assessing impacts of proposed projects).52 The pilot test on a natural gas concession in Ivano-Frankivsk proved so successful that Ukrainian officials sought to expand the approach to other assessments.⁵³ And in Indonesia, a UK-funded project launched in 2018 aims to improve accountability in the area of illegal wildlife trade by implementing penalties beyond traditionally considered criminal sanctions.⁵⁴ The project will test the application of an approach to quantifying the costs of illegal wildlife trafficking to society through an innovative civil liability suit seeking

⁴⁹ See Section 2.4.

⁵⁰ UNEP 2006.

⁵¹ Zbrodoff 2012.

⁵² Skrylnikov and Tustanovska 1998.

⁵³ Teel 2001.

⁵⁴ Government of the United Kingdom 2018.

to hold perpetrators financially responsible for harm. In Cambodia, as the country sought to rebuild from a brutal series of wars, one of the challenges was to rebuild land rights: under the Khmer Rouge, private property was banned; Viet Nam later introduced measures for communal ownership; and by the 1990s, there was an urgent need to restore the rule of law in the land sector. Given the massive scale of the challenge and uncertainties regarding which approach would work best in rebuilding land title and the cadastre system, Cambodia and its international partners adopted a pilot approach, which was tested in one place, then scaled up.⁵⁵

Pilot testing can be done on a country by country basis, as in Ukraine, Indonesia, and Cambodia. It is also possible to **bundle a** series of pilot projects into a more coherent program to develop and test a suite of tools to advance environmental rule of law. For example, from 2004 to 2006, UNEP supported more than a dozen pilot projects in countries and regions around the world designed to test approaches for improving compliance with and enforcement of multilateral environmental agreements.⁵⁶ These included efforts to develop national laws that implemented a cluster of related environmental agreements; build capacity of environmental negotiators, civil society, the media, and customs officers through innovative training; harmonize national reporting; and develop toolkits and checklists.

Moving forward, it is likely that countries and their partners will need to consider both how to capitalize on specific opportunities in a country and to strategically develop, test, and deploy new tools that may help many countries improve the environmental rule of law. In both cases, it is often easier to convince decision makers and staff alike that a particular approach can work if it is already tested and proven.

6.5 Way Forward

This Report provides a roadmap for tracking the effectiveness of efforts to improve the environmental rule of law globally. It frames why environmental rule of law is important, and it elaborates a conceptual framework for understanding, utilizing, and advocating for environmental rule of law. For

key elements of environmental rule of law, it has highlighted trends both positive and negative. Some of these trends were already in view, but this is the first attempt to stitch them together as a coherent whole and to aggregate the relevant data.

In addition to trends, this Report has highlighted diverse examples of good practice, including many innovations from developing countries who often have all the challenges faced by developed countries but with fewer staff and other resources with which to address those challenges. The geographic range of these efforts and innovations reinforces two related key points of this Report: **developing and advancing the environmental rule of law is a challenge for all countries; it is also a growing priority**.

The Report has also identified opportunities for countries and the international community to strengthen the environmental rule of law. Each chapter identifies priority actions and opportunities for that particular set of issues, and this chapter identifies four broad considerations and opportunities that cut across multiple components.

It is worth noting that while there is substantial agreement on the importance of environmental rule of law and the significant costs when it is weak, there is limited empirical data on which approaches

⁵⁵ Bruch et al. 2008.

⁵⁶ Bruch 2006.

6. Future Directions

are most effective and under what circumstances. The global environmental rule of law assessment, discussed in Section 6.3, will provide an empirical foundation for analysis of the effectiveness and significance of the different approaches.

Finally, it is important to note that environmental rule of law remains a dynamic and evolving topic. Even in the absence of clear empirical data, there are many noregrets measures that countries can readily adopt, even as scientific understanding is improving. And if the goals of the hundreds of national laws, regulations, and policies governing the environment around the world are to be met—including public health and welfare, robust economies, and peaceful societies—an overriding priority must be placed on strengthening the environmental rule of law.

Chapter 1 (Introduction)

- Adani, Riccardo Marchi, and Roberto Riccuiti. 2014. "The Resource Curse, Rule of Law and Accountability in African Countries: A Dynamic Panel Analysis." *Economics Bulletin AccessEcon* 34 (3): 1905-1916.
- Akhtar, Shamshad. 2015. "Rule of Law to Support the Post-2015 Development Agenda and Sustainable Development Goals." Keynote Address Presented at the Asia-Pacific Roundtable: Environmental Rule of Law for Sustainable Development in Support of the Post-2015 Development Agenda, Bangkok, Thailand, May 19. <u>http://</u> www.unep.org/delc/Portals/24151/Documents/keynote-rule-of-law-shamshad.pdf.

Auty, R.M. 1993. Sustaining Development in Mineral Economies: The Resource Curse Thesis. London: Routledge.

- Baird, Matthew. 2017. "The Role of Environmental Court and Tribunals—International Experience and Lessons Learned." Presentation at Workshop on Mainstreaming Legal Knowledge in Environmental Issues, Phnom Penh, Cambodia, August 21-25.
- Banisar, David, Sejal Parmar, Lalanath de Silva, and Carole Excell. 2012. "Moving from Principles to Rights: Rio 2012 and Access to Information, Public Participation, and Justice." *Sustainable Development Law & Policy* 7 (3). https://papers.srn.com/sol3/papers.cfm?abstract_id=2164685.
- Beierle, Thomas C. 2010. Democracy in Practice: Public Participation in Environmental Decisions. New York: Routledge.
- Bell, Ruth Greenspan. 1992. "Environmental Law Drafting in Central and Eastern Europe." *Environmental Law Reporter* 22: 10597-10605.

——. 2003. "Choosing Environmental Policy Instruments in the Real World." In *Concerted Action on Tradeable Emissions Permits Country Forum*. Paris, France: Organisation for Economic Co-operation and Development. http://www.oecd.org/env/cc/2957706.pdf.

- Bosselmann, Klaus. 2014. "The Rule of Law Grounded in the Earth: Ecological Integrity as a Grundnorm." In *The Earth Charter, Ecological Integrity and Social Movements,* edited by Laura Westra, and Mirian Vilela, Oxfordshire, U.K., and New York: Routledge.
- Brower, Charles N., and Lee A. Steven. 2001. "Who Then Should Judge?: Developing the International Rule of Law under NAFTA Chapter 11." *Chicago Journal of International Law* 2:193.
- Brown Weiss, Edith. 1984. "The Planetary Trust: Conservation and Intergenerational Equity." *Ecology Law Quarterly* 11 (4): 495-582.
- ———. 2007. "Climate Change, Intergenerational Equity, and International Law." *Vermont Journal of Environmental Law* 9: 615-627.
- ———. 2011. "The Evolution of International Envrionmental Law." Japanese Yearbook of International Law 54:1-27.
- Bruch, Carl. 2006. "Growing Up: International Environmental Law Enters Adolescence." *Environmental Forum* 23:28-33.
- Bruch, Carl, and John Pendergrass, Jr. 2003. "Type II Partnerships, International Law, and the Tragedy of the Commons." *Georgetown International Environmental Law Review* 15:855-886.
- Cameron, James, and Juli Abouchar. 1991. "The Precautionary Principle: A Fundamental Principle of Law and Policy for the Protection of the Global Environment." *Boston College International and Comparative Law Review* 14:1-27.
- Carothers, Thomas. 1998. "The Rule of Law Revival." *Foreign Affairs* (March/April). <u>https://www.foreignaffairs.com/</u> <u>articles/1998-03-01/rule-law-revival</u>.
- Christmann, Petra, and Glen Taylor. 2001. "Globalization and the Environment: Determinants of Firm Self-Regulation in China." *Journal of International Business Studies* 32 (3): 439–458.
- Daggett, Susan D. 2002. "NGOs as Lawmakers, Watchdogs, Whistle-blowers, and Private Attorneys General." *Colorado Journal of International Environmental Law and Policy* 13:99-113.
- Daly, Erin, and James May. 2016. "Bringing Constitutional Dignity and Environmental Rights Jurisprudence." *Journal of Human Rights and the Environment* 7 (2): 218-242. <u>https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2773781</u>.

Davis, Crystal, Lauren Williams, Sarah Lupberger, and Florence Daviet. 2013. *Assessing Forest Governance: The Governance of Forests Initiative Indicator Framework*. Washington, D.C.: World Resources Institute. <u>http://www.wri.org/publication/assessing-forest-governance</u>.

Dupuy, Kendra. 2016. Email message to Environmental Law Institute, 3 November.

- Dupuy, Kendra, James Ron, and Aseem Prakash. 2016. "Hands Off My Regime! Governments' Restrictions on Foreign Aid to Non-Governmental Organizations in Poor and Middle-Income Countries." *World Development* 84 (August): 299–311.
- Ebbesson, Jonas. 2010. "The Rule of Law in Governance of Complex Socio-Ecological Changes." *Global Environmental Change* 20 (3): 414-422.
- Eden, Sally. 1996. "Public Participation in Environmental Policy: Considering Scientific, Counter-Scientific and Non-Scientific Contributions." *Public Understanding of Science* 5 (3): 183-204.
- Environmental Democracy Index. 2015. "Accessibility of Environmental Information Requests." <u>http://environmentaldemocracyindex.org/rank-countries#1/1</u>.
- Epremian, Levon, Päivi Lujala, and Carl Bruch. 2016. "High-Value Natural Resources Revenues and Transparency: Accounting for Revenues and Peace." In *Oxford Research Encyclopedia*. New York: Oxford University Press. <u>doi:10.1093/acrefore/9780190228637.013.21</u>.
- European Commission. 2017. The EU Environmental Implementation Review (EIR) Package: Common Challenges and How to Combine Efforts to Deliver Better Results. <u>http://ec.europa.eu/environment/eir/pdf/full_report_en.pdf</u>.
- European Foundation Centre. 2017. *Why Shrinking Civil Society Space Matters in International Development and Humanitarian Action*. Belgium: European Foundation Centre. <u>http://www.philanthropy-impact.org/sites/default/files/downloads/29212.pdf</u>.
- Excell, Carole, and Elizabeth Moses. 2017. *Thirsting for Justice: Transparency and Poor People's Struggle for Clean Water in Indonesia, Mongolia, and Thailand.* Washington, D.C.: World Resources Institute. <u>http://wriorg.s3.amazonaws.com/s3fs-public/thirsting-for-justice.pdf</u>.
- Farber, Daniel A. 1999. "Taking Slippage Seriously: Noncompliance and Creative Compliance in Environmental Law." *Harvard Environmental Law Review* 23:297–325.
- ———. 2016. "The Implementation Gap in Environmental Law." *Journal of Korean Law* 16:3-32.
- Feigenbaum, James J., and Christopher Muller. 2016. "Lead Exposure and Violent Crime in the Early Twentieth Century." *Explorations in Economic History* 62: 51-86.
- Feng, Bree. 2015. "China Backpedals on Shale Gas." *Chemical & Engineering News*, January 19. <u>http://cen.acs.org/articles/93/i3/China-Backpedals-Shale-Gas.html</u>.
- Ferris, Richard J., and Hongjun Zhang. 2003. "Reaching out to the Rule of Law: China's Continuing Efforts to Develop an Effective Environmental Law Regime." *William & Mary Bill of Rights Journal* 11:569-602.
- Friedberg, James, and Branimir Zaimov. 1993. "Politics, Environment, and the Rule of Law in Bulgaria." Duke Journal of Comparative & International Law 4:225-263.
- Fulton, Scott, and Antonio Benjamin. 2011. "Foundations of Sustainability." *The Environmental Forum* 28 (6). <u>http://www.eli.org/the-environmental-forum/novemberdecember-2011</u>.
- Fulton, Scott, and Steve Wolfson. 2014. "Strengthening National Environmental Governance to Promote Sustainable Development." In *Global Environmental law at a Crossroads,* edited by Robert Percival, Jolene Lin, and William Piermattei. Edward Elgar.
- Getliffe, Kate. 2002. "Proceduralisation and the Aarhus Convention: Does Increased Participation in the Decision-Making Process Lead to More Effective EU Environmental Law?" *Environmental Law Review* 4 (2): 101-116.
- Global Witness. 2014. *Deadly Environment: The Dramatic Rise in Killings of Environmental and Land Defenders*. London. http://globalinitiative.net/wp-content/uploads/2017/12/Global-Witness-Deadly-Environment-June-2014.pdf.

——. 2017. Defenders of the Earth. London. <u>https://www.globalwitness.org/en/campaigns/environmental-activists/</u> <u>defenders-earth/</u>.

Annex I: References Cited

Goyenechea, Alejandra, and Rosa A. Indenbaum. 2015. *Combating Wildlife Trafficking from Latin America to the United States*. Washington, DC: Defenders of Wildlife. <u>https://defenders.org/sites/default/files/publications/combating-wildlife-trafficking-from-latin-america-to-the-united-states-and-what-we-can-do-to-address-it.pdf</u>.

Greve, Michael S. 1990-1991. "The Private Enforcement of Environmental Law." Tulane Law Review 65:339-394.

- Guo, Meiyu, Yuan Xu, and Yongqin David Chen. 2014. "Fracking and Pollution: Can China Rescue Its Environment in Time?" *Environmental Science & Technology* 48 (2): 891-892.
- Hardin, G. 1968. "The Tragedy of the Commons." Science 162:1243-1248.
- Harremoes, Paul, David Gee, Malcom MacGarvin, Andy Stirling, Jane Keys, Brian Wynne, and Sofia Guedes Vaz (eds.). 2002. *The Precautionary Principle in the 20th Century: Late Lessons from Early Warnings*. London: Routledge.
- Henderson, Vernon. 1995. "Effects of Air Quality Regulation." NBER Working Paper Series. National Bureau of Economic Research, May. <u>doi:10.3386/w5118</u>.
- IBCSD (Indonesia Business Council for Sustainable Development). 2016. "The Cost of Conflict in Oil Palm in Indonesia." <u>http://conflictresolutionunit.id/en/activities/research/detail/1</u>.
- IDLO (International Development Law Organization). 2014. *Doing Justice to Sustainable Development: Integrating the Rule of Law into the Post-2015 Development Agenda*. Rome. <u>http://www.idlo.int/sites/default/files/pdfs/publications/Doing%20Justice%20to%20Sustainable%20Development.pdf</u>.
- INECE (International Network for Environmental Compliance and Enforcement). 2009. *Principles of Environmental Compliance and Enforcement Handbook*. Washington, DC: National Service Center for Environmental Publication. <u>http://www.themisnetwork.eu/news/48/19/Principles-of-Environmental-Compliance-and-Enforcement-Handbook/d,resources%20template.html</u>.
- IPEN (International POPs Elimination Network). 2016. *Global Lead Paint Elimination Report*. <u>http://ipen.org/sites/</u> <u>default/files/documents/IPEN-global-lead-report-final-Oct-2016-en.pdf</u>.
- IUCN World Commission on Environmental Law. 2016. "IUCN World Declaration on the Environmental Rule of Law." April 29. <u>https://www.iucn.org/sites/dev/files/content/documents/english_world_declaration_on_the_environmental_rule_of_law_final.pdf</u>.
- Johnson, Samuel. 2015. "Escaping the Tragedy of the Commons through Targeted Punishment." *Royal Society Open Science* 2:150223.
- Karl, T. L. 1997. The Paradox of Plenty: Oil Booms and Petro-States. Berkeley: University of California Press.
- Kaufmann, Daniel. 2015. "Evidence-Based Reflections on Natural Resource Governance and Corruption in Africa." In *Africa at a Fork in the Road: Taking Off or Disappointment Once Again*, edited by Ernesto Zedillo, Olivier Cattaneo, and Haynie Wheeler, 239–260. New Haven, CT: Yale Center for the Study of Globalization. <u>http://ycsg.yale.edu/sites/default/files/files/africa.pdf</u>.
- Kaufmann, Daniel, and Aart Kraay. 2008. "Governance Indicators: Where Are We, Where Should We Be Going?" *The World Bank Research Observer* 23 (1): 1–30. <u>doi:10.1093/wbro/lkm012</u>.
- Keller, Marius, Ingeborg Niestroy, Armando García Schmidt, and Andreas Esche. 2013. Costa Rica: Pioneering Sustainability. In *Winning Strategies for a Sustainable Future*. Bertelsmann Stiftung.
- Knight, Rachael, Judy Adoko, Teresa Auma, Ali Kaba, Alda Salomao, Silas Siakor, and Issufo Tankar. 2012. *Protecting Community Lands and Resources: Evidence from Liberia, Mozambique and Uganda*. Rome: International Development Law Organization and Namai. <u>https://namati.org/wp-content/uploads/2012/10/protecting_community_lands_resources_Final_LR.pdf</u>.
- Lee, Jaeah, and James West. 2014. "America's Fracking Boom Comes to China." *The Atlantic*, September 19. <u>http://www.theatlantic.com/international/archive/2014/09/china-fracking-natural-gas-report/380450/</u>.
- London Conference on the Illegal Wildlife Trade. 2014. "Declaration of the London Conference on the Illegal Wildlife Trade." London. <u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/281289/london-wildlife-conference-declaration-140213.pdf</u>.
- Marchant, Gary E. 2003. "From General Policy to Legal Rule: Aspirations and Limitations of the Precautionary Principle." *Environmental Health Perspectives* 111 (14): 1799-1803.
- Markell, David L., and Robert L. Glicksman. 2014. "A Holistic Look at Agency Enforcement." *North Carolina Law Review* 93:1.

Marmor, Andrei. 2004. "The Rule of Law and Its Limits." Law and Philosophy 34 (1): 1-43.

- Mielke, H.W., and S. Zahran. 2012. "The Urban Rise And Fall Of Air Lead (Pb) and the Latent Surge and Retreat of Societal Violence." *Environment International* 43 (August): 48-55. <u>doi:10.1016/j.envint.2012.03.005</u>.
- Moore, Charles James. 2005. "Synthetic Polymers in the Marine Environment: A Rapidly Increasing, Long-term Threat." *Environmental Research* 108 (2): 131-139. doi:10.1016/j.envres.2008.07.025.
- Nagan, Winston P. 2014. "The Global Rule of Law, Social Justice and the Commons." Presentation to the Montenegro Academy of Art & Science, March 22-24. <u>http://www.worldacademy.org/files/masa_podgorica_2014/The_Global_</u> <u>Rule_of_Law_and_the_Commons_W.Nagan.pdf</u>.
- NRGI (Natural Resource Governance Institute). 2017. 2017 Resource Governance Index. New York. <u>https://</u>resourcegovernance.org/sites/default/files/documents/2017-resource-governance-index.pdf.
- NYU (New York University). n.d. "Economic Costs of Childhood Lead Exposure in Low-and Middle-Income Countries." Accessed June 27, 2018. <u>http://www.med.nyu.edu/pediatrics/research/environmentalpediatrics/leadexposure.</u>
- O'Donnell, Guillermo A. 2004. "Why the Rule of Law Matters." Journal of Democracy 15 (4): 32-46.
- OECD (Organisation for Economic Co-operation and Development). 2007. *Environmental Performance Reviews: China*. <u>http://www.oecd.org/china/environmentalperformancereviewschina2007.htm</u>.
- -----. 2017. "Gross Domestic Product (GDP)" OECD iLibrary. <u>doi:10.1787/dc2f7aec-en</u>.
- *Oil & Gas Journal*. 2018. "WoodMac: Chinese shale gas production to reach 17 billion cu m in 2020." *Oil & Gas Journal*. Accessed June 27, 2018. <u>https://www.ogj.com/articles/2018/04/woodmac-chinese-shale-gas-production-to-reach-17-billion-cu-m-in-2020.html</u>.
- Paltseva, Elena. 2013. "Empirical Evidence on Natural Resources and Corruption." Forum for Research on Eastern Europe and Emerging Economies (FREE) Policy Brief Series. <u>http://freepolicybriefs.org/2013/02/25/empirical-evidence-on-natural-resources-and-corruption/</u>.
- Pande, Rohini, Robert Rosenbaum, and Kevin Rowe. 2015. "Closing India's Implementation Gap on Pollution Control." *Fair Observer*, August 24. <u>https://www.google.com/amp/s/www.fairobserver.com/region/central_south_asia/closing-indias-implementation-gap-on-pollution-control-79201/amp/</u>.
- Percival, Robert V. 2008. "The Challenge of Chinese Environmental Law." University of Maryland Legal Studies Research Paper No. 2008-40. <u>https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1277290</u>.
- Pring, George, and Catherine Pring. 2009. *Greening Justice: Creating and Improving Environmental Courts and Tribunals*. The Access Initiative. <u>https://www.eufje.org/images/DocDivers/Rapport%20Pring.pdf</u>.
 - ——. 2016. Environmental Courts & Tribunals: A Guide for Policy Makers. Nairobi: United Nations Environment Programme. <u>http://wedocs.unep.org/bitstream/handle/20.500.11822/10001/environmental-courts-tribunals.</u> <u>pdf?sequence=1</u>.
- Rasul, Imran, and David Hollywood. 2012. "Can Nudges Help to Cut Household Energy Consumption?" *The Guardian*, January 27. <u>https://www.theguardian.com/sustainable-business/behaviour-change-energy-consumption</u>.
- Ristroph, Elizabeth Barratt. 2012. "The Role of Philippine Courts in Establishing the Environmental Rule of Law." Environmental Law Reporter 42 (9): 10866-10877. <u>https://elr.info/news-analysis/42/10866/role-philippine-courts-establishing-environmental-rule-law</u>.
- Ross, Michael L. 2004. "What Do We Know about Natural Resources and Civil War?" *Journal of Peace Research* 41 (3): 337-356.
- Ruhl, J.B. 2005. "Regulation by Adaptive Management—Is It Possible?" *Minnesota Journal of Law, Science and Technology* 7:21-57.
- Rustad, Siri A., Paivi Lujala, and Philippe Le Billon. 2012. "Building or Spoiling Peace? Lessons from the Management of High-Value Natural Resources." In *High-Value Natural Resources and Post-Conflict Peacebuilding*, edited by Paivi Lujala and Siri A. Rustad. London: Routledge.
- Rutter, Tasmin. 2015. "The Rise of Nudge The Unit Helping Politicians to Fathom Human Behavior." *The Guardian*, July 23.
- Scheffer, M., S. Carpenter, and B. Young. 2005. "Cascading Effects of Overfishing Marine Systems." *Trends in Ecology & Evolution* 20 (11): 579-581. doi:10.1016/j.tree.2005.08.018.

Annex I: References Cited

- Schulte, William J., and Ashlee Stetser. 2014. "On the Path to Sustainable Development: An Assessment of Cambodia's Draft Environmental Impact Assessment Law." *The Cambodia Law and Policy Journal* 3:97-126.
- Service, Owain, Michael Hallsworth, David Halpern, Felicity Algate, Rory Gallagher, Sam Nguyen, Simon Ruda, and Michael Sanders. 2014. *EAST: Four Simple Ways to Apply Behavioural Insights*. <u>https://38r8om2xjhhl25mw24492dir-wpengine.netdna-ssl.com/wp-content/uploads/2015/07/BIT-Publication-EAST_FA_WEB.pdf.</u>
- Shenkman, Ethan, and Steve Wolfson. 2015. "China Declares War Against Pollution." *Environmental Forum* 32 (5): 36-41. <u>https://www.eli.org/sites/default/files/docs/tef/tef32-5.pdf</u>.
- Simpson, Sally S., and Melissa Rorie. 2011. "Motivating Compliance: Economic and Material Motives for Compliance." In *Explaining Compliance: Business Responses to Regulation*, edited by Christine Parker and Vibeke Lehmann Nielsen. Edward Elgar.
- Solomon, Susan, Gian-Kasper Plattner, Reto Knutti, and Pierre Friedlingstein. 2009. "Irreversible Climate Change Due to Carbon Dioxide Emissions." *Proceedings of the National Academy of Sciences* 106 (6): 1704-1709. <u>doi:10.1073/</u> <u>pnas.0812721106</u>.
- Solow, R.M. 1974. "Intergenerational Equity and Exhaustible Resources." The Review of Economic Studies 41: 29-45.
- Thornton, Dorothy, Neil A. Gunningham, and Robert A. Kagan. 2005. "General Deterrence and Corporate Environmental Behavior." *Law & Policy* 27 (2): 262–288. <u>doi:10.1111/j.1467-9930.2005.00200.x</u>.
- Tienhaara, Kyla. 2006. "What You Don't Know Can Hurt You: Investor-State Disputes and the Protection of the Environment in Developing Countries." *Global Environmental Politics* 6 (4): 73-100.

Transparency International. 2015. "Corruption Perceptions Index 2015." https://www.transparency.org/cpi2015/.

- UCL (University College London). 2018. "Creating a New System of Environmental Regulation, Enforcement and Sanctions." Accessed June 06, 2018. <u>http://www.ucl.ac.uk/impact/case-study-repository/environmental-regulation-and-sanction</u>.
- UN (United Nations). 2008. "Guidance Note of the Secretary-General: UN Approach to Rule of Law Assistance." <u>https://www.un.org/ruleoflaw/blog/document/guidance-note-of-the-secretary-general-un-approach-to-rule-of-law-assistance/</u>.
- -----. 2012. The Future We Want. undocs.org/A/CONF.216/L.1. New York.
- -----. n.d. "Rule of Law and Development." https://www.un.org/ruleoflaw/rule-of-law-and-development/.
- UNEA (United Nations Environment Assembly). 2014. "Illegal Wildlife Trade." Resolution I/3. Nairobi. <u>http://wedocs.unep.org/bitstream/handle/20.500.11822/17285/K1402364.pdf?sequence=3&isAllowed=y</u>.
- UNEP (United Nations Environment Programme). 2002. Guidelines on Compliance with and Enforcement of Multilateral Environmental Agreements. Nairobi, Kenya.
 - -----. 2006. Manual on Compliance with and Enforcement of Multilateral Environmental Agreements. Nairobi, Kenya.
- ———. 2009. From Conflict to Peacebuilding: The Role of Natural Resources and the Environment. Nairobi, Kenya. <u>https://postconflict.unep.ch/publications/pcdmb_policy_01.pdf</u>.
- ——. 2012a. Proposed Medium-Term Strategy for the Period 2014-2017, Report of the Executive Director. UNEP/ GC.27.9. January 9. <u>http://undocs.org/UNEP/GC.27/9</u>.
- ———. 2012b. *GEO5: Global Environment Outlook*. Nairobi, Kenya. <u>https://wedocs.unep.org/bitstream/</u> <u>handle/20.500.11822/8021/GEO5_report_full_en.pdf?isAllowed=y&sequence=5</u>.
- -——. 2013. "Decision 27/9: Advancing Justice, Governance and Law for Environmental Sustainability." <u>http://www.</u> unep.org/delc/Portals/24151/Documents/Decisisions27-9Advancing_Justice_Governance&Law.pdf.
- -----. 2014a. Enforcement of Environmental Law: Good Practices from America, Central Asia, ASEAN Countries and China. <u>http://wedocs.unep.org/bitstream/handle/20.500.11822/9968/enforcement-environmental-laws.</u> pdf?sequence=1&isAllowed=y.
- -----. 2014b. "Implementation of Principle 10 of the Rio Declaration on Environment and Development." UN Environment Assembly Resolution I/13. June 27. <u>https://wedocs.unep.org/bitstream/</u> <u>handle/20.500.11822/17285/K1402364.pdf?sequence=3&isAllowed=y</u>.
- ———. 2015. "Toolkit for Establishing Laws to Control the Use of Lead in Paint." <u>https://www.unenvironment.org/</u> toolkit-establishing-laws-eliminate-lead-paint.

- ———. 2017. Model Law and Guidance for Regulating Lead Paint. Nairobi, Kenya. <u>https://wedocs.unep.org/bitstream/</u> <u>handle/20.500.11822/22417/Model_Law_Guidance_%20Lead_Paint.pdf?sequence=1&isAllowed=y</u>.
- UNEP International Advisory Council for Environmental Justice 2015. "Environmental Rule of Law: Critical to Sustainable Development." Issue Brief. May.
- UNEP (United Nations Environment Programme) and ELI (Environmental Law Institute). 2016. *Environmental Rule of Law Discussion Paper*. December 7.
- UNEP (United Nations Environment Programme) and INTERPOL. 2016. *The Rise of Environmental Crime*. Response Assessment. <u>https://wedocs.unep.org/bitstream/handle/20.500.11822/7662/-The_rise_of_environmental_crime_A_growing_threat_to_natural_resources_peace,_development_and_security-2016environmental_crimes. pdf.pdf?sequence=3&isAllowed=y.</u>
- UNGA (United Nations General Assembly). 2014. Strengthening and Coordinating UN Rule of Law Activities, Report of the Secretary-General. A/69/181. undocs.org/A/69/181.
- ———. 2015. Transforming Our World: The 2030 Agenda for Sustainable Development. A/RES/70/1. <u>https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20</u> Development%20web.pdf.
- UNSC (United Nations Security Council). 2004. *The Rule of Law and Transitional Justice in Conflict and Post-Conflict Societies, Report of the Secretary-General*. S/2004/616. undocs.org/S/2004/616.
- USEPA (United States Environmental Protection Agency). 2001. *The United States Experience with Economic Incentives for Protecting the Environment*. EPA-240-R-01-001. Washington, D.C. <u>https://nepis.epa.gov/Exe/ZyPDF.cgi/</u> <u>P1004DTB.PDF?Dockey=P1004DTB.PDF</u>.
 - ——. 2004. International Experiences with Economic Incentives for Protecting the Environment. EPA-236-R-04-001. Washington, D.C. <u>https://nepis.epa.gov/Exe/ZyPDF.cgi/900B0600.PDF?Dockey=900B0600.PDF</u>.
- ———. 2018. "Environmental Incentives." <u>https://www.epa.gov/environmental-economics/economic-incentives</u>.
- USTR (United States Trade Representative). 2015. "Fact Sheet: Investor-State Dispute Settlement (ISDS)." <u>https://ustr.gov/about-us/policy-offices/press-office/fact-sheets/2015/march/investor-state-dispute-settlement-isds</u>.
- Vandenbergh, Michael. 2015. "The Individual as Polluter." Environmental Law Reporter 35:10723.
- Velders, Guus J.M., Stephen O. Anderson, John S. Daniel, David W. Fahey, and Mack McFarland. 2007. "The Importance of the Montreal Protocol in Protecting Climate." *PNAS* 104 (12): 4814-4819. <u>doi:10.1073/</u> <u>pnas.0610328104</u>.
- Walters, Carl. 1986. Adaptive Management of Renewable Resources. Macmillan Publishing Company.
- Wang, Canfa. 2007. "Chinese Environmental Law Enforcement: Current Deficiencies and Suggested Reforms." *Vermont Journal of Environmental Law* 8: 159-193. <u>http://vjel.vermontlaw.edu/files/2013/07/Chinese-Environmental-Law-Enforcement.pdf</u>.
- Williams, Byron K., Robert C. Szaro, and Carl D. Shapiro. 2009. *Adaptive Management: The U.S. Department of the Interior Technical Guide*. <u>https://www2.usgs.gov/sdc/doc/DOI-%20Adaptive%20ManagementTechGuide.pdf</u>.
- Wong, Edward. 2016. "Clampdown in China Restricts 7,000 Foreign Organizations." New York Times, Apr. 28.
- Wright, John Paul, Kim N. Dietrich, M. Douglas Ris, Richard W. Hornung, Stephanie D. Wessel, Bruce P. Lanphear, Mona Ho, and Mary N. Rae. 2008. "Association of Prenatal and Childhood Blood Lead Concentrations with Criminal Arrests in Early Adulthood." *Public Library of Science Medicine* 5 (5): e101.
- Wübbeke, Jost. 2014. "The Three-Year Battle for China's New Environmental Law." *ChinaDialogue*. <u>https://www.chinadialogue.net/article/show/single/en/6938-The-three-year-battle-for-China-s-new-environmental-law</u>.
- Xiaocong, Wang. 2015. "Environmental Frets as Frackers Move in." Caixin Online. <u>http://english.caixin.com/2012-11-</u> 20/100462881.html?p1.
- Yang, Tseming. 2012. "The UN Rio+20 Conference on Sustainable Development What Happened?" *ASIL Insights* 16 (28). <u>https://www.asil.org/insights/volume/16/issue/28/un-rio20-conference-sustainable-development%E2%80%94what-happened</u>.
- Zaelke, D., D. Kaniaru, and E. Kruzikova. 2005. *Making Law Work: Environmental Compliance & Sustainable Development*. Cameron May.

Chapter 2 (Institutions)

- Acemoglu, Daron, and James A. Robinson. 2012. Why Nations Fail: The Origins of Power, Prosperity, and Poverty. New York: Crown Business.
- AECEN (Asian Environmental Compliance and Enforcement Network. 2015. "Rapid Country Program Assessments." http://www.aecen.org/rapid-country-program-assessments.
- Adler, Daniel, Caroline Sage, and Michael Woolcock. 2009. "Interim Institutions and Development Process: Opening Spaces for Reform in Cambodia and Indonesia." Brooks World Poverty Institute Working Paper No. 86. University of Manchester, Manchester, U.K. <u>doi:10.2139/ssrn.1421808</u>.
- Agrawal, Arun. 2001. "Common Property Institutions and Sustainable Governance of Resources." *World Development* 29 (10): 1649-1672. doi:10.1016/S0305-750X(01)00063-8.
- Ahmad, Ali, and Carl Bruch. 2002. "Maintaining Mizan: Protecting Biodiversity in Muslim Communities." *Environmental Law Reporter News and Analysis* 32 (1): 10020-10037.
- Altman, Stephanie L., Sandra S. Nichols, and John T. Woods. 2012. "Leveraging High-Value Natural Resources to Restore the Rule of Law: The Role of the Liberia Forest Initiative in Liberia's Transition to Stability." In *High-Value Natural Resources and Peacebuilding*, edited by Päivi Lujala and Siri Aas Rustad, 337-365. London: Routledge.
- Andrews, Matt, Lant Pritchett, and Michael Woolcock. 2012. "Escaping Capability Traps through Problem-Driven Iterative Adaptation (PDIA)." Working Paper No. 299. Washington, D.C.: Center for Global Development. <u>http://</u> <u>www.cgdev.org/files/1426292_file_Andrews_Pritchett_Woolcock_traps_FINAL.pdf</u>.
- Asiamah, Frederick. 2015. "AngloGold Falls Flat in Environment Test." For God and Ghana: Accountability, Equity and Sustainability (blog), April 28. <u>http://profasiamah.blogspot.com/2015/04/anglogold-falls-flat-in-environment-test.</u> <u>html</u>.
- ASOSAI (*Asian* Organization of Supreme Audit Institutions) Working Group on Environmental Auditing. [n.d.]. *Environmental Auditing in Asia.*
- Ayres, Ian, and John Braithwaite. 1995. *Responsive Regulation: Transcending the Deregulation Debate.* New York: Oxford University Press.
- Azfar, Omar. 2007. "Disrupting Corruption." In *Performance Accountability and Combating Corruption*, edited by Anwar Shah, 255–83. Washington, D.C.: World Bank. <u>https://openknowledge.</u> worldbank.org/bitstream/handle/10986/6732/405240Performa1010FFICIAL0USE0ONLY1. pdf;jsessionid=D57BC3881FBE75880D1384C099D8A6FB?sequence=1.
- Baldwin, Robert, and Julia Black. 2008. "Really Responsive Regulation." *The Modern Law Review* 71 (1): 59–94. doi:10.1111/j.1468-2230.2008.00681.x.
- Baptista, Chrisna. 2016. "Next Generation Compliance: EPA Embraces Technology and Transparency to Promote Compliance with Environmental Laws." *Trends* 47 (6) (July/August). <u>https://www.epa.gov/sites/production/</u> <u>files/2016-09/documents/article-next-gen-embraces-technology-and-transparency.pdf</u>.
- Beevers, Michael D. 2015. "Peace Resources? Governing Liberia's Forests in the Aftermath of Conflict." *International Peacekeeping* 22 (1): 26-42.
- Billings, Leon G. 2015. "Edmund S. Muskie: A Man with a Vision." Maine Law Review 67 (2): 233.
- Blackman, Allen, Bidisha Lahiri, William Pizer, Marisol Rivera Planter, and Carlos Muños Piña. 2009. *Voluntary Environmental Regulation in Developing Countries*. Washington, DC: Resources for the Future.
- Blanc, Florentin, and Marielle Leseur. 2011. *How to Reform Business Inspections: Design, Implementation, Challenges.* Washington, D.C.: World Bank. <u>doi:10.1596/25076</u>.
- Booth, David. 2011. "Aid Effectiveness: Bringing Country Ownership (and Politics) Back In." Working Paper No. 336. London: Overseas Development Institute. <u>https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/6028.pdf</u>.
- Braithwaite, John. 2006. "Responsive Regulation and Developing Economies." *World Development* 34 (5): 884–898. doi:10.1016/j.worlddev.2005.04.021.

- Bruch, Carl, Aleksandra Egorova, Katie Meehan, and Youself Bougaihis. 2017. "Natural Resources, Peacebuilding and Power Sharing in Post-Conflict Constitutions." In *Implementing Environmental Constitutionalism: Current Global Challenges*, edited by James May and Erin Daly. Cambridge, UK: Cambridge University Press.
- Bruch, Carl, Libor Jansky, Mikiyasu Nakayama, and Kazimierz A. Salewicz, eds. 2005. *Public Participation in the Governance of International Freshwater Resources*. Tokyo: United Nations University Press.
- Capano, Giliberto, Jeremy Rayner, and Anthony R. Zito. 2012. "Governance from the Bottom Up: Complexity and Divergence in Comparative Perspective." *Public Administration* 90 (1): 56-73. <u>doi:10.1111/j.1467-9299.2011.02001.x</u>.
- Cheung, Loretta, Kemen Austin, Andhyta Utami, Jennifer Bangoura, and Fred Stolle. 2014. "Building National Forest and Land-Use Information Systems: Lessons from Cameroon, Indonesia, and Peru." Working Paper. Washington, D.C.: World Resources Institute. <u>http://www.wri.org/sites/default/files/land-use-infomationsystems_working_paper.pdf</u>.
- Commission of the European Communities. 2004. "Integrating Environmental Considerations into Other Policy Areas - A Stocktaking of the Cardiff Process." Commission Working Document. COM (2004) 394 final, Brussels. <u>https://ec.europa.eu/europeaid/sites/devco/files/communication-environment-in-other-policy-areascom2004394-20040601_en.pdf</u>.
- CHRTF (Cambodia Human Rights Task Force). 2015. Logs and Patronage: Systematic Illegal Logging and the Destruction of State Forests and Protected Areas in Rattanakiri and Stung Treng Provinces, Cambodia. The NGO Forum on Cambodia.
- Damania, Richard. 2002. "Environmental Controls with Corrupt Bureaucrats." *Environment and Development Economics* 7 (3): 407–427. doi:10.1017/S1355770X02000256.
- Darko-Mensah, A., and C. Okereke. 2013. "Can Environmental Performance Rating Programmes Succeed in Africa?: An Evaluation of Ghana's AKOBEN Project." *Management of Environmental Quality* 25 (5): 599-618. <u>doi:10.1108/</u> <u>MEQ-01-2012-0003</u>.
- Delaney, Arthur. 2016. "How Flint's Water Got Poisonous." *Huffington Post*, January 19 (last updated January 23). <u>http://www.huffingtonpost.com/entry/how-flint-water-got-poisonous_us_569907f5e4b0b4eb759e1426</u>.
- De Renzio, Paolo, Pamela Gomez, and James Sheppard. 2009. "Budget transparency and development in resource Dependent Countries." *International Social Science Journal* 57 (s1): 57-69.
- DFID (Department for International Development, UK). 2004. "Appendix 3. Understanding 'Political Will'." <u>https://www.gov.uk/dfid-research-outputs/appendix-3-understanding-political-will</u>.
- Dickinson, Janis L., Benjamin Zuckerberg, and David N. Bonter. 2010. "Citizen Science as an Ecological Research Tool: Challenges and Benefits." *Annual Review of Ecology, Evolution, and Systematics* 41:149-172.
- Drèze, Jean, and Amartya Sen. 1989. Hunger and Public Action. New York: Oxford University Press.
- Driscoll, Charles T., Robert P. Mason, Hing Man Chan, Daniel J. Jacob, and Nicola Pirrone. 2013. "Mercury as a Global Pollutant: Sources, Pathways, and Effects." *Environmental Science & Technology* 47 (10): 4967-4983.
- Duflo, Esther, Michael Greenstone, Rohini Pande, and Nicholas Ryan. 2013. "Truth-Telling by Third-Party Auditors and the Response of Polluting Firms: Experimental Evidence from India." *The Quarterly Journal of Economics* 128 (4): 1499–1545. <u>doi:10.1093/qje/qjt024</u>.
- Eggert, Hakan, and Razack B. Lokina. 2010. "Regulatory Compliance in Lake Victoria Fisheries." *Environment and Development Economics*, 15 (2): 197-217. doi:10.1017/S1355770X09990106.
- Epremian, Levon, Päivi Lujala, and Carl Bruch. 2016. "High-Value Natural Resources Revenues and Transparency: Accounting for Revenues and Peace." *Oxford Research Encyclopedia*. New York: Oxford University Press. <u>doi:</u> <u>10.1093/acrefore/9780190228637.013.21</u>.
- Esty, Daniel C. 2002. "National Environmental Performance Measurement and Determinants." In *Environmental Performance Measurement: The Global Report 2001-2002*, edited by Michael E. Porter, Daniel C. Esty, and Peter Cornelius, 12–23. New York: Oxford University Press.
- European Environment Agency. 2017. "Italy Country Briefing The European Environment State and Outlook 2015." https://www.eea.europa.eu/soer-2015/countries/italy.

- Evans, L. S., C. C. Hicks, P. J. Cohen, P. Case, M. Prideaux, and D. J. Mills. 2015. "Understanding leadership in the environmental sciences." *Ecology and Society* 20 (1): 50. <u>doi:10.5751/ES-07268-200150</u>.
- Evans, Peter. 2004. "Development as Institutional Change: The Pitfalls of Monocropping and the Potentials of Deliberation." *Studies in Comparative International Development* 38 (4): 30–52. <u>doi:10.1007/BF02686327</u>.
- Fabricius, C., C. Folke, G. Cundill, and L. Schultz. 2007. "Powerless Spectators, Coping Actors, and Adaptive Co-Managers: A Synthesis of the Role of Communities in Ecosystem Management." *Ecology and Society* 12 (1): 29. <u>http://www.ecologyandsociety.org/vol12/iss1/art29/</u>.
- Fajardo, Raquel Yrigoyen. 2004. "Legal Pluralism, Indigenous Law and the Special Jurisdiction in the Andean Countries." *Beyond Law* 27:32-49. <u>https://www.jfce.jus.br/images/esmafe/material-didatico/2010/legalPluralism.</u> <u>pdf</u>.
- Fasterling, Björn. 2012. "Development of Norms through Compliance Disclosure." *Journal of Business Ethics* 106 (1): 73-87.
- Fatorelli, Leandra, Maria Fernanda Gebara, Peter May, Shaozeng Zhang, and Monica Di Gregorio. 2015. "The REDD+ Governance Landscape and the Challenge of Coordination in Brazil." *CIFOR Infobriefs* 115 (March). <u>doi:10.17528/</u> <u>cifor/005508</u>.
- Fulton, Scott, and Antonio Benjamin. 2011. "Foundations of Sustainability." *The Environmental Forum* 28 (6). <u>http://www.eli.org/the-environmental-forum/novemberdecember-2011</u>.
- Gaventa, John, and Rosemary McGee. 2013. "The Impact of Transparency and Accountability Initiatives." *Development Policy Review* 31 (s1): s3-s28.
- Gilley, Bruce. 2006. "The Determinants of State Legitimacy: Results for 72 Countries." International Political Science Review / Revue Internationale de Science Politique 27 (1): 47–71.
- Global Witness. 2015. *The Cost of Luxury: Cambodia's Illegal Trade in Precious Wood with China*. London. <u>https://www.globalwitness.org/documents/17788/the_cost_of_luxury_1.pdf</u>.
- GNNCSDS (Global Network of National Councils for Sustainable Development and Similar Bodies). n.d. "Burkina Faso: National Council on Environment and Sustainable Development." Accessed April 7, 2017. <u>http://www.ncsds.org/index.php/homepage/background/86-profiles/90-burkina-faso</u>.
- Goldman Environmental Foundation. n.d. "Zuzana Čaputová." *Goldman Environmental Prize*. Last modified 2017. <u>http://www.goldmanprize.org/recipient/zuzana-caputova/</u>.
- Goncalves, Marilyne Pereira, Melissa Panjer, Theodore S. Greenberg, and William B. Magrath. 2012. *Justice for Forests: Improving Criminal Justice Efforts to Combat Illegal Logging*. Washington, D.C.: World Bank. <u>doi:10.1596/978-0-</u> <u>8213-8978-2</u>.
- Gorodnichenko, Yuriy, and Klara Sabirianova Peter. 2007. "Public Sector Pay and Corruption: Measuring Bribery from Micro Data." *Journal of Public Economics* 1 (5): 963-991.
- Gray, Wayne B., and Jay P. Shimshack. 2011. "The Effectiveness of Environmental Monitoring and Enforcement: A Review of the Empirical Evidence." *Review of Environmental Economics and Policy* 5 (1): 3–24. <u>doi:10.1093/reep/req017</u>.
- Grindle, Merilee S. 2004. "Good Enough Governance: Poverty Reduction and Reform in Developing Countries." *Governance* 17 (4): 525–548. doi:10.1111/j.0952-1895.2004.00256.x.
- Hill, Barry, and John Pendergrass. 2011. "Training Professionals." The Environmental Forum 28 (4): 44.
- Hindin, David, Ben Grumbles, George Wyeth, Kristen Benedict, Tim Watkins, George Aburn, Jr., Megan Ulrich, Steve Lang, Kelly Poole, and Alexandra Dapolito Dunn. 2016. "Advanced Monitoring Technology Opportunities and Challenges: A Path Forward for EPA, States, and Tribes." *The Magazine for Environmental Managers*, November. <u>https://www.epa.gov/sites/production/files/2016-11/documents/article-adv-mon-technology.pdf</u>.
- Intelligence Project on Environmental Crime. 2015. *Report on Environmental Crime in Europe*. The Hague. <u>https://www.europol.europa.eu/sites/default/files/publications/ipec_report_on_environmental_crime_in_europe.pdf</u>.
- INECE (International Network for Environmental Compliance and Enforcement). 2009. *Principles of Environmental Compliance and Enforcement Handbook*. Washington, D.C.: International Network for Environmental Compliance and Enforcement/Institute for Governance & Sustainable Development.

- -----. 2015. Special Report on Next Generation Compliance. Washington, D.C. <u>http://www.themisnetwork.eu/uploads/</u> documents/Studies/00_INECE_NextGenReport.pdf.
- INTOSAI (International Organization of Supreme Audit Institutions). 2016. *Guidance on Conducting Performance Audit with an Environmental Perspective: Exposure Draft.* Vienna.
- INTOSAI WGEA (Working Group on Environmental Auditing). 2013. Addressing Fraud and Corruption Issues when Auditing Environmental and Natural Resource Management: Guidance for Supreme Audit Institutions.
- Ivanova, Kate. 2011. "Corruption and Air Pollution in Europe." Oxford Economic Papers 63 (1): 49–70. doi:10.1093/ oep/gpq017.
- Jordan, Andrew, and Andrea Lenschow. 2010. "Environmental Policy Integration: A State of the Art Review." *Environmental Policy and Governance* 20 (3): 147–158. <u>doi:10.1002/eet.539</u>.
- Kaufmann, Daniel. 2015. "Evidence-Based Reflections on Natural Resource Governance and Corruption in Africa." In *Africa at a Fork in the Road: Taking Off or Disappointment Once Again*, edited by Ernesto Zedillo, Olivier Cattaneo, and Haynie Wheeler, 239–260. New Haven, CT: Yale Center for the Study of Globalization. <u>http://ycsg.yale.edu/sites/default/files/files/africa.pdf</u>.
- Kaufmann, Daniel, Aart Kraay, and Pablo Zoido-Lobaton. 1999. "Governance Matters." Working Paper WPS 2196. World Bank, Washington, DC. <u>http://documents.worldbank.org/curated/en/1999/10/439992/governance-matters</u>.
- Kaufmann, Daniel, Judit Montoriol-Garriga, and Francesca Recanatini. 2008. "How Does Bribery Affect Public Service Delivery? Micro-Evidence from Service Users and Public Officials in Peru." Working Paper 4492, Policy Research Working Papers. Washington, D.C.: World Bank. <u>doi: 10.1596/1813-9450-4492</u>.
- Keene, Michelle L. 1999. "Developing a Culture of Industrial Environmental and Compliance." Environment Department Working Papers 70, Pollution Management Series. Washington, D.C.: World Bank. <u>http://</u> <u>documents.worldbank.org/curated/en/995311468781505888/Developing-a-culture-of-industrial-environmental-</u> <u>compliance-a-new-approach</u>.
- Kennedy, Merrit, and Susan Phillips. 2017. "Trump Aims to 'Eliminate' Clean Water Rule." National Public Radio, February 28. <u>http://www.npr.org/sections/thetwo-way/2017/02/28/517016071/trump-aims-to-eliminate-clean-water-rule</u>.
- Kuhn, Robyn L., and Christine Schuh. 2013. "Improving Greenhouse Gas Verification through Comprehensive Guidance and Policy Requirements." In *Compliance Strategies to Deliver Climate Benefits*, edited by Jo Gerardu, Meredith Koparova, Ken Markowitz, Elise Stull, and Durwood Zaelke. Washington, D.C.: Institute for Governance & Sustainable Development.
- Lambsdorff, Johann Graf. 2005. "Consequences and Causes of Corruption—What Do We Know from a Cross-Section of Countries?" Discussion Paper V-34-05, University of Passau, Germany. <u>http://www.icgg.org/downloads/</u> <u>Causes%20and%20Consequences%20of%20Corruption%20-%20Cross-Section.pdf</u>.
- Langseth, Petter, Rick Stapenhurst, and Jeremy Pope. 1997. "The Role of a National Integrity System in Fighting Corruption." Working Paper. Washington, D.C.: World Bank.
- Lazarus, Richard J. 2008. The Making of Environmental Law. Chicago: University of Chicago Press.
- Levi, Margaret. 1989. Of Rule and Revenue. Berkeley: University of California Press.
- Levi, Margaret, and Audrey Sacks.2009. "Legitimating Beliefs: Sources and Indicators." *Regulation & Governance* 3 (4): 311–333. doi:10.1111/j.1748-5991.2009.01066.x.
- Levy, Brian, and Francis Fukuyama. 2010. "Development Strategies: Integrating Governance and Growth." Working Paper No. 5196. Washington, D.C.: World Bank. <u>https://openknowledge.worldbank.org/bitstream/handle/10986/19915/WPS5196.pdf?sequence=1</u>.
- Ma, Deyong, and Zhengxu Wang. 2014. "Governance Innovations and Citizens Trust in Local Government: Electoral Impacts in China's Townships." *Japanese Journal of Political Science* 15 (3): 373–395. <u>doi:10.1017/</u><u>S1468109914000152</u>.
- Mallett, Richard, Jessica Hagen-Zanker, Rachel Slater, and Georgina Sturge. 2015. "Surveying Livelihoods, Service Delivery and Governance: Baseline Evidence from the Democratic Republic of Congo, Nepal, Pakistan, Sri Lanka and Uganda." Working Paper No. 31.London: Overseas Development Institute. <u>http://fic.tufts.edu/assets/</u>

Surveying-livelihoods-service-delivery-and-governance-baseline-evidence-from-the-Democratic-Republic-of-Congo-Nepal-Pakistan-Sri-Lanka-and-Uganda.pdf.

- Mandel, Gregory N., and Gary E. Marchant. 2014. "The Living Regulatory Challenges of Synthetic Biology." *Iowa Law Review* 100 (1): 155-200.
- Mapaure, Clever. 2009. "Water Wars": Legal Pluralism and Hydropolitics in Namibian Water Law. LLM Thesis. LLM Thesis. University of Namibia.
- Mazurana, Dyan, Anastasia Marshak, Jimmy Hilton Opio, and Rachel Gordon. 2014. "Surveying Livelihoods, Service Delivery and Governance: Baseline Evidence from Uganda." Working Paper No. 12. London: Overseas Development Institute. <u>https://assets.publishing.service.gov.uk/media/57a089ac40f0b649740001f0/WP12</u> <u>service_delivery_and_governance_Uganda.pdf</u>.
- Manglik, Vrinda, Vikki Leitch, Catherine McLinn, John A. Pendergrass, Daniel Schramm, and Louise H. Yeung. 2010. *Comparative Federalism: Best Practices Analysis of Environmental Protection Authorities in Federal States*. Washington, D.C.: Environmental Law Institute.
- McCullough, Aoife. 2015. *The Legitimacy of States and Armed Non-State Actors: Topic Guide*. Birmingham, UK: University of Birmingham. <u>http://www.gsdrc.org/wp-content/uploads/2015/08/Legitimacy.pdf</u>.
- McWhirter, Cameron. 2016. "Michigan Officials Responsible for Flint Water Crisis, Panel Finds." *Wall Street Journal*, March 23. <u>http://www.wsj.com/articles/michigan-officials-responsible-for-flint-water-crisis-governor-appointed-panel-finds-1458762906</u>.
- Meinzen-Dick, Ruth, and Leticia Nkonya. 2007. "Understanding Legal Pluralism in Water and Land Rights: Lessons from Africa and Asia." In *Community-Based Water Law and Water Resource Management Reform in Developing Countries*, edited by V. van Koppen, M. Giordano, and J. Butterworth, 12-27. Cambridge, MA: CABI.
- Meinzen-Dick, Ruth S., and Rajendra Pradhan. 2002. *Legal Pluralism and Dynamic Property Rights*. Washington, D.C.: CGIAR Systemwide Program on Collective Action and Property Rights, International Food Policy Research Institute.

——. 2016. "Property Rights and Legal Pluralism in Post-Conflict Environments: Problem or Opportunity for Natural Resource Management?" In *Governance, Natural Resources, and Post-Conflict Peacebuilding,* edited by Carl Bruch, Carroll Muffett, and Sandra S. Nichols. London: Routledge.

- Mhlanga, Lindah, Kefasi Nyikahadzoi, and Tobias Haller, eds. 2014. *Fragmentation of Natural Resources Management: Experiences from Lake Kariba*. Münster: LIT Verlag.
- Miyazawa, Naori. 2013. "Customary Law and Community-Based Natural Resource Management in Post-Conflict Timor-Leste." In Land and Post-Conflict Peacebuilding, edited by Jon Unruh and Rhodri C. Williams. London: Routledge.
- Mookherjee, Dilip, and I. P. L. Png. 1995. "Corruptible Law Enforcers: How Should They Be Compensated?" *The Economic Journal* 105 (428): 145-159. doi:10.2307/2235324.
- New Zealand Ministry of Education. 2007. *The New Zealand Curriculum*. Wellington, NZ: Learning Media Limited. http://nzcurriculum.tki.org.nz/content/download/1108/11989/file/The-New-Zealand-Curriculum.pdf.
- New Zealand State Services Commission. 2009. *Implementing the Code of Conduct–Resources for Organizations*. <u>http://www.ssc.govt.nz/upload/downloadable_files/Implementing-the-code-of-conduct-updated-7-Dec-09.pdf</u>.
- Nguyen, Ngoc Sinh, and Van Vui Phung. 1998. "A Large Scale Survey Using Environmental Inspections to Assess and Enforce the Implementation of the Law on Environmental Protection in Vietnam, 1997." In *Proceedings: International Conference on Environmental Compliance and Enforcement, 5th, Volume 1,* 47–56. Monterey, CA: USEPA; Ministry of Housing, Spatial Planning and the Environment, The Netherlands; United Nations Environment Program; European Commission; Environmental Law Institute; Environment Canada; The Environment Agency, United Kingdom. <u>goo.gl/ZrRpbT</u>.
- Noland, Marcus, and Cullen S. Hendrix. 2014. *Confronting the Curse: The Economics and Geopolitics of Natural Resource Governance*. Washington, D.C.: Peterson Institute for International Economics.
- North, Douglass C. 1990. *Institutions, Institutional Change, and Economic Performance*. Cambridge, UK: Cambridge University Press. <u>http://www.cambridge.org/us/academic/subjects/politics-international-relations/political-economy/institutions-institutional-change-and-economic-performance</u>.

- North, Douglass C., Daron Acemoglu, Francis Fukuyama, and Dani Rodrik. 2008. *Governance, Growth, and Development Decision-making.* Washington, D.C.: World Bank. <u>http://siteresources.worldbank.org/</u> <u>EXTPUBLICSECTORANDGOVERNANCE/Resources/governanceandgrowth.pdf</u>.
- OECD (Organisation for Economic Co-operation and Development). 2010a. *Making Reform Happen: Lessons from OECD Countries*. Paris. <u>doi:10.1787/9789264086296-en</u>.
- ———. 2010b. The State's Legitimacy in Fragile Situations: Unpacking Complexity. Paris. <u>https://doi.org/10.1787/9789264083882-en</u>.
- -----. 2012. Meeting the Water Reform Challenge. Paris: OECD Publishing. https://doi.org/10.1787/22245081.
- -----. 2017. "Gross Domestic Product (GDP)." doi:10.1787/dc2f7aec-en.
- ———. 2018. Reshaping Decentralised Development Co-operation: The Key Role of Cities and Regions for the 2030 Agenda. Paris. <u>http://www.oecd.org/migration/reshaping-decentralised-development-co-operation-9789264302914-en.</u> <u>htm.</u>
- Ostrom, Elinor. *Governing the Commons.* 1990. Cambridge, UK: Cambridge University Press. <u>http://www.cambridge.org/us/academic/subjects/politics-international-relations/political-economy/governing-commons-evolution-institutions-collective-action?format=PB.</u>
- Paddock, LeRoy, and Jessica A. Wentz, eds. 2014. *Next Generation Environmental Compliance and Enforcement.* Washington, D.C.: Environmental Law Institute.
- Pagdee, A., Y. Kim, and P. J. Daugherty. 2006. "What Makes Community Forest Management Successful: A Meta-Study from Community Forests throughout the World." *Society & Natural Resources* 19 (1): 33-52. <u>http://dx.doi.org/10.1080/08941920500323260</u>.
- Paltseva, Elena. 2013. "Empirical Evidence on Natural Resources and Corruption." Forum for Research on Eastern Europe and Emerging Economies (FREE) Policy Brief Series. <u>http://freepolicybriefs.org/2013/02/25/empirical-evidence-on-natural-resources-and-corruption/</u>.
- Paul, Elizabeth. 2010. "Motivating Civil Servants for Reform and Performance." Capacity Is Development Global Event Working Paper. New York: UN Development Programme. <u>https://orbi.ulg.ac.be/bitstream/2268/37467/1/</u> <u>Motivating%20Civil%20Servants%20for%20Reform%20and%20Performance.pdf</u>.
- Pearson, Erica. 2012. "Free Tuition! Ecuador Will Pay for Nationals to Attend Top Colleges Who Vow to Work Back Home." *New York Daily News*, June 6. <u>http://www.nydailynews.com/news/world/free-tuition-ecuador-pay-nationals-attend-top-colleges-vow-work-back-home-2-years-afterward-article-1.1087092</u>.
- Pendergast, Shannon M., Judith A. Clarke, and G. Cornelis Van Kooten. 2011. "Corruption, Development and the Curse of Natural Resources." *Canadian Journal of Political Science* 44 (2): 411-437.
- People's Republic of China. 2016. The 13th Five-Year Plan for Economic and Social Development of the People's Republic of China (2016-2020). Beijing: Central Compilation & Translation Press.
- Percival, Robert V., Alan S. Miller, Christopher H. Shroeder, and James P. Leape. 1992. *Environmental Regulation: Law, Science, and Policy.* Boston: Little, Brown and Co.
- Peter, Zsombor, and Aun Pheap. 2013. "Illegal Logging a Booming Business in Virachey Park." *The Cambodia Daily*, December 9. <u>https://www.cambodiadaily.com/archives/illegal-logging-a-booming-business-in-virachey-park-48823/</u>.
- Podobnik, Boris, Vuk Vukovic, and H. Eugene Stanley. 2015. "Does the Wage Gap Between Private and Public Sectors Encourage Political Corruption?" *PLOS ONE* 10 (10): e0141211. <u>http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0141211</u>.
- Pritchett, Lant, Michael Woolcock, and Matt Andrews. 2010. "Capability Traps? The Mechanisms of Persistent Implementation Failure." CGD Working Paper No. 234. Washington, D.C.: Center for Global Development. <u>http://</u> www.cgdev.org/sites/default/files/1424651_file_Pritchett_Capability_FINAL.pdf.
- Reitze Jr, Arnold W., and Lee D. Hoffman. 1995. "Self-Reporting and Self-Monitoring Requirements under Environmental Law." *Environmental Lawyer* 1 (1995): 681.
- Reynolds, Glenn Harlan. 2001. "Environmental Regulation of Nanotechnology: Some Preliminary Observations." Environmental Law Reporter News and Analysis, 31 (6): 10681-10688.

- Rijckeghem, Caroline Van, and Beatrice Weder. 2001. "Bureaucratic Corruption and the Rate of Temptation: Do Wages in the Civil Service Affect Corruption, and by How Much?" *Journal of Development Economics* 65 (2): 307-31. doi:10.1016/s0304-3878(01)00139-0.
- Rodrik, Dani. 2008. "Second-Best Institutions." American Economic Review 98 (2): 100–104. doi:10.1257/aer.98.2.100.
- Rodrik, Dani, Arving Subramanian, and Francesco Trebbi. 2002. "Institutions Rule: The Primacy of Institutions over Integration and Geography in Economic Development." NBER Working Paper No. 9305. Cambridge, MA: National Bureau of Economic Research. <u>http://www.nber.org/papers/w9305.pdf</u>.
- Roos, Katarina, and Anders Lidström. 2014. "Local Policies and Local Government Legitimacy. The Swedish Case." *Urban Research & Practice* 7 (2): 137–152. doi:10.1080/17535069.2014.910920.
- Rose, Cecily. 2015. International Anti-Corruption Norms: Their Creation and Influence on Domestic Legal Systems. Oxford: Oxford University Press.
- Scheffer, M., F. Westley, and W. Brock. 2003. "Slow Response of Societies to New Problems: Causes and Costs." *Ecosystems* 6 (5): 493-502. <u>doi:10.1007/s10021-002-0146-0</u>.
- Sen, Amartya. 1992. Inequality Reexamined. New York: Harvard University Press.
- -----. 1999a. Development as Freedom. New York: Oxford University Press.
- ———. 1999b. "Democracy as a Universal Value." Journal of Democracy 10 (3): 3–17. doi:10.1353/jod.1999.0055.
- Sekyi, Ransford. 2011. "AKOBEN: Ghana's New Initiative for Environmental Performance Rating and Disclosure in the Mining Sector." In Proceedings of the 15th Int'l Conf. on Tailings & Mine Waste 2011. Vancouver, Canada: Norman B. Keevil Institute of Mining Engineering, University of British Columbia. <u>http://www.infomine.com/library/ publications/docs/Sekyi2011.pdf</u>.
- Shimshack, Jay P. 2007. "Monitoring, Enforcement, & Environmental Compliance: Understanding Specific & General Deterrence." State-of-Science White Paper. Washington, D.C.: USEPA. <u>https://archive.epa.gov/compliance/resources/reports/compliance/research/web/pdf/meec-whitepaper.pdf</u>.
- Silberman, Jon D. 2000. "Does Environmental Deterrence Work? Evidence and Experience Say Yes, but We Need to Understand How and Why." *Environmental Law Reporter* 30 (7): 10523–10536.
- Singh, Satyajit. 2017. "Diverse Property Rights, Institutions and Decentralisation: Forest Management by Village Forest Councils in Uttarakhand." *Policy and Society* 32:43-59.
- Sjöstedt, Martin, and Aksel Sundström. 2015. "Coping with Illegal Fishing: An Institutional Account of Success and Failure in Namibia and South Africa." *Biological Conservation* 189 (September): 78–85. <u>doi:10.1016/j.</u> <u>biocon.2014.09.014</u>.
- Smith, Robert J., Robert D. J. Muir, Matthew J. Walpole, A. P. Balmford, and Nigel Leader-Williams. 2003. "Governance and the Loss of Biodiversity." *Nature* 426 (November): 67–70. <u>doi:10.1038/nature02025</u>.
- Spears, Larry C. 2010. "Character and Servant Leadership: Ten Characteristics of Effective, Caring Leaders." *Journal of Virtues and Leadership* 1 (1): 25-30.
- Stajkovic, Alexander. D., and Fred Luthans. 2003. "Behavioral Management and Task Performance in Organizations: Conceptual Background, Meta - Analysis, and Test of Alternative Models." *Personnel Psychology* 56 (1): 155-194.
- Tanzi, Vito, and Hamid Davoodi. 1998. "Corruption, Public Investment, and Growth." In *The Welfare State, Public Investment, and Growth*, edited by Hirofumi Shibata and Toshihiro Ihori, 41-60. Tokyo: Springer-Verlag.
- Tarlock, A. Dan. 2001. "Future of Environmental Rule of Law Litigation." Pace Environmental Law Review 19:575-610.
- Thant, Aye Aye.1994. One World Visions of U Thant Secretary-General of the United Nations 1961-1971. 2nd ed.
- Thornton, Dorothy, Neil A. Gunningham, and Robert A. Kagan. 2005. "General Deterrence and Corporate Environmental Behavior." *Law & Policy* 27 (2): 262–288. <u>doi:10.1111/j.1467-9930.2005.00200.x</u>.
- Tietenberg, Tom, and Lynne Lewis. 2016. *Environmental and Natural Resource Economics.* 10th ed. New York: Routledge.
- UN (United Nations). 2012. The Future We Want. undocs.org/A/CONF.216/L.1. New York.

- UNECE (United Nations Economic Commission for Europe). 2014. *The Aarhus Convention: An Implementation Guide*. 2nd ed. Geneva: United Nations. <u>https://www.unece.org/fileadmin/DAM/env/pp/Publications/Aarhus_Implementation_Guide_interactive_eng.pdf</u>.
- UNEP (United Nations Environment Programme). 2006. *Manual on Compliance with and Enforcement of Multilateral Environmental Agreements*. Nairobi, Kenya.
- ———. 2010. Auditing the Implementation of Multilateral Environmental Agreements (MEAs): A Primer for Auditors. Nairobi. <u>https://www.nik.gov.pl/plik/id,2190.pdf</u>.
- ———. 2015. "Creating a Sustainable Financial System: A Role for Finance Ministries." Inquiry Working Paper 15/09. Geneva. <u>http://unepinquiry.org/wp-content/uploads/2015/10/Creating_a_Sustainable_Financial_System.pdf</u>.
- UNEP (United Nations Environment Programme) and CAEC (China ASEAN Environmental Cooperation Centre). 2014. *Enforcement of Environmental Law: Good Practices from Africa, Central Asia, ASEAN Countries and China.* Nairobi: UNON. <u>http://wedocs.unep.org/bitstream/handle/20.500.11822/9968/enforcement-environmental-laws.</u> <u>pdf?sequence=1&isAllowed=y</u>.
- UNDP-GEF (United Nations Development Programme Global Environment Facility). 2015. "National Committee on Climate Change Established in Serbia." Accessed April 7, 2017. <u>http://www.klimatskepromene.rs/english/news/</u> <u>article/national-committee-on-climate-change-established-in-serbia</u>.
- United Nations Sustainable Development. 1992. *Agenda 21*. United Nations Conference on Environment & Development, Rio de Janeiro, Brazil, 3 to 14 June 1992. <u>https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf</u>.
- UN General Assembly. 1948. Resolution 217(III)/A. "Universal Declaration of Human Rights." December 10. <u>http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/217(III)</u>.

———. 2014. Report of the Secretary General. A/68/213/Add.1. "Strengthening and Coordinating UN Rule of Law Activities, Report of the Secretary-General." July 11. undocs.org/A/68/213/Add.1.

- Unruh, Jon, and Rhodri C. Williams. 2013. "Lessons Learned in Land Tenure and Natural Resource Management in Post-Conflict Societies." In *Land and Post-Conflict Peacebuilding*, edited by Jon Unruh and Rhodri C. Williams, 535-576. London: Routledge.
- USEPA (U.S. Environmental Protection Agency). 2015. "EPA Finalizes Rule to Modernize Clean Water Act Reporting." News Release. September 24. <u>https://www.epa.gov/newsreleases/epa-finalizes-rule-modernize-clean-water-act-reporting</u>.
- ———. 2017. "The Inside Story: A Guide to Indoor Air Quality." Last updated February 28, 2017. <u>https://www.epa.</u> <u>gov/indoor-air-quality-iaq/inside-story-guide-indoor-air-quality</u>.
- ———. 2018. "National Enforcement Initiatives." May 3. <u>https://www.epa.gov/enforcement/national-enforcement-initiatives</u>.
- Wegrich, Kai, and Vid Štimac. 2014. "Coordination Capacity." In *The Problem-Solving Capacity of the Modern State: Governance Challenges and Administrative Capacities*, edited by Martin Lodge and Kai Wegrich. Oxford: Oxford University Press.
- Welsch, Heinz. 2003. Corruption, Growth, and the Environment: A Cross-Country Analysis. Berlin: DIW Berlin.
- Whitton, Howard. 2001. "Implementing Effective Ethics Standards in Government and the Civil Service." *Transparency International* (February): 1-12. <u>http://www.oecd.org/mena/governance/35521740.pdf</u>.
- World Bank. 2006. Strengthening Forest Law and Governance: Addressing a Systemic Constraint to Sustainable Development. Washington, D.C.

———. 2008. The Growth Report: Strategies for Sustained Growth and Inclusive Development. Washington, D.C. <u>http://</u> elibrary.worldbank.org/doi/book/10.1596/978-0-8213-7491-7.

———. 2011. FIAS 2011 Annual Review. Washington, D.C. <u>http://documents.worldbank.org/curated/</u> en/443301468339600846/FIAS-2011-annual-review.

World Bank Independent Evaluation Group. 2008. *Public Sector Reform: What Works and Why? An IEG Evaluation of World Bank Support.* Washington, D.C: World Bank. <u>http://siteresources.worldbank.org/EXTPUBSECREF/</u><u>Resources/psr_eval.pdf</u>.

- Annex I: References Cited
- Zsombor, Peter, and Aun Pheap. 2013. "Illegal Logging a Booming Business in Virachey Park." *Cambodia Daily,* December 9. <u>https://www.cambodiadaily.com/archives/illegal-logging-a-booming-business-in-virachey-park-48823/</u>.

Chapter 3 (Civic Engagement)

- Access Info Europe and Centre for Law and Democracy. 2015. "Global Right to Information Rating." *Global Right to Information Rating*. <u>http://www.rti-rating.org/</u>.
- Ackerman, John M. 2005. *Social Accountability in the Public Sector: A Conceptual Discussion*. World Bank. <u>http://siteresources.worldbank.org/INTPCENG/214574-1116506074750/20542263/FINALAckerman.pdf</u>.
- Adomokai, Rosemary, and William R. Sheate. 2004. "Community Participation and Environmental Decision-Making in the Niger Delta." *Environmental Impact Assessment Review* 24 (5): 495-518.
- African Commission on Human and Peoples' Rights. 2012. "Model Law on Access to Information for Africa." <u>http://</u> <u>www.achpr.org/files/instruments/access-information/achpr_instr_model_law_access_to_information_2012_eng.</u> <u>pdf</u>.
- African Development Bank Group Transition Support Department. 2016. From Fragility to Resilience: Managing Natural Resources in Fragile Situations in Africa. Côte d Ivoire: African Development Bank Group.
- Agbayani, R. 2005. "Best Practices in Forest Management through the Co-management Approach: The Case of Nueva Vizcaya." Paper presented at Philippine Forestry Development Forum, 2–3 June, Asian Development Bank, Manila.
- Altman, Stephanie L., Sandra S. Nichols, and John T. Woods. 2012. "Leveraging High-Value Natural Resources to Restore the Rule of Law: The Role of the Liberia Forest Initiative in Liberia's Transition to Stability." In *High-Value Natural Resources and Post-Conflict Peacebuilding*, edited by P. Lujala and S. A. Rustad, 337–365. London: Routledge. <u>http://environmentalpeacebuilding.org/assets/Documents/LibraryItem_000_Doc_107.pdf</u>.
- ASEAN (Association of Southeast Asian Nations). 2009. *Roadmap for an ASEAN Community, 2009-2015*. Jakarta: Association of Southeast Asian Nations Secretariat. <u>http://www.meti.go.jp/policy/trade_policy/east_asia/dl/</u> <u>ASEANblueprint.pdf</u>.
- Auty, R.M. 1993. Sustaining Development in Mineral Economies: The Resource Curse Thesis. London: Routledge.
- Ba Kader, Abou Bakr Ahmed, Abdul Latif Tawfik El Shirazy Al Sabbagh, Mohamed Al Sayyed Al Glenid, and Mouel Yousef Izzidien Samarrai. 1983. "Basic Paper on the Islamic Principles for the Conservation of the Natural Environment." IUCN Environmental Law and Policy Paper 20. Gland, Switzerland: International Union for Conservation of Nature and Natural Resources (IUCN); Kingdom of Saudi Arabia, Meteorology and Environmental Protection Administration (MEPA). <u>https://portals.iucn.org/library/efiles/documents/EPLP-020.</u> <u>pdf</u>.
- ———. 1994. "Environmental Protection in Islam." IUCN Environmental Policy and Law Paper 20 Rev. Gland, Switzerland and Cambridge, UK: International Union for the Conservation of Nature Commission on Environmental Law and Meteorology and Environmental Protection Administration (MEPA) of the Kingdom of Saudi Arabia. <u>http://cmsdata.iucn.org/downloads/eplp_020reven.pdf</u>.
- Banisar, D., Sejal Parmar, Lalanath de Silva, and Carole Excell. 2012. "Moving from Principles to Rights: Rio 2012 and Access to Information, Public Participation, and Justice." *Sustainable Development Law &Policy* 7 (3): 10-11. <u>https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2164685</u>.
- BAPE (Bureau d'Audiences Publiques sur l'Environnement). 2014. *Issues Relating to Shale Gas Exploration and Exploitation in the St. Lawrence Lowlands.* Inquiry and Public Hearing Report, November. <u>http://www.bape.gouv.</u> <u>qc.ca/sections/rapports/publications/bape307_Chap13_ENG.pdf</u>.
- Barrow, C.J. 1997. Environmental and Social Impact Assessment. Routledge.
- Beierle, Thomas C., and Jerry Cayford. 2002. *Democracy in Practice: Public Participation in Environmental Decisions*. Washington, D.C.: Resources for the Future.
- Blaikie, Piers. 2006. "Is Small Really Beautiful? Community-based Natural Resource Management in Malawi and Botswana." *World Development* 34 (11): 1942-1957. <u>doi:10.1016/j.worlddev.2005.11.023</u>.

- Blaney, R.J.P., A.C.V. Philippe, M.J.O. Pocock, and G.D. Jones. 2016. *Citizen Science and Environmental Monitoring: Towards a Methodology for Evaluating Opportunities, Costs and Benefits.* Wiltshire, UK. <u>http://www.ukeof.org.uk/</u> <u>resources/citizen-science-resources/Costbenefitcitizenscience.pdf</u>.
- Blessing and Daitch 2018. "How is Participatory Environmental Monitoring Organized in Mongolia?" *Policy Forum Guyana*, February 8. <u>http://www.policyforumgy.org/international/participatory-environmental-monitoring-organized-mongolia/</u>.
- Blundell, Arthur G. 2008. "Scoping Study on the Benefits of Incorporating Forestry into the Extractive Industries Transparency Initiative, with Specific Reference to Liberia." Natural Capital Advisors, LLC. <u>https://eiti.org/files/ LEITI-forestry-report.pdf</u>.
- Bonney, Rick, Jennifer L. Shirk, Tina B. Philipps, Andrea Wiggins, Heidi L. Ballard, Abraham J. Miller-Rushing, and Julia K. Parrish. 2014."Next Steps for Citizen Science." *Science* 343 (6178): 1436-1437. <u>http://science.sciencemag.org/</u> <u>content/343/6178/1436</u>.
- Bourdeau, K. S., C. S. Fulton, and A. C. Stilton. 2015. "China Proposes Framework for Public Participation in Environmental Policymaking and Enforcement." *Beveridge & Diamond PC News Alert,* May 6. <u>http://www.bdlaw.com/assets/htmldocuments/2015-05-06%20China%20Proposes%20Framework%20for%20Public%20</u> Participation%20in%20Environmental%20Policymaking%20and%20Enforcement.pdf.
- Boyd, David R. 2012. *The Environmental Rights Revolution: A Global Study of Constitutions, Human Rights, and the Environment*. University of British Columbia Press.
- Boyle, Alan. 2007. "Human Rights or Environmental Rights? A Reassessment." *Fordham Environmental Law Review* 18 (3): 471-511.
- ——. 2012. "Human Rights and the Environment: Where Next?" *European Journal of International Law* 23 (3): 613–42. doi:10.1093/ejil/chs054.
- Bruch, Carl, ed. 2002. *The New "Public": The Globalization of Public Participation*. Washington, D.C.: Environmental Law Institute. <u>https://www.eli.org/sites/default/files/eli-pubs/d1205.pdf</u>.
- Bruch, Carl, and John Broderick. 2017. "International Law and Processes." In *Decision Making in Environmental Law*, edited by LeRoy C. Paddock, Robert L. Glicksman, and Nicholas S. Bryner, 35-51.
- Bruch, Carl, Wole Coker, and Chris Van Arsdale. 2007. *Constitutional Environmental Law: Giving Force to Fundamental Principles in Africa*. 2nd ed. Washington, D.C.: Environmental Law Institute.
- Bruch, Carl, Mikiyasu Nakayama, Jessica Troell, Lisa Goldman, and Elizabeth Maruma Mrema. 2007. "Assessing the Assessments: Improving Methodologies for Impact Assessment in Transboundary Watercourses." International Journal of Water Resources Development 23 (3): 391–410. <u>doi:10.1080/07900620701400161</u>.
- Bureau d[®]audiences publiques sur l[®]environnement. 2011. [®]Développement durable de l[®]industrie des gaz de schiste au Québec.[®] Rapport d[®]enquête et d[®]audience publique 273. Québec: Bureau d[®]audiences publiques sur l[®]environnement.
- Camera Deputaților Romania. 2008. *Monitorul Oficial* nr. 125/18. <u>http://www.cdep.ro/pls/legis/legis_pck.htp_act?ida=77729</u>.
- Clynes, Tom. 2010. "Confronting Corruption." *Environmental Policy, Wildlife*, December 8. <u>http://www.conservationmagazine.org/2010/12/confronting-corruption/</u>.
- CO-SEED. 2017a. *Examples of Best Practices: Access to Information in Estonia*. <u>http://co-seed.eu/en/press/examples-of-best-practices-access-to-information-in-estonia/184</u>.
- CO-SEED. 2017b. *How Public Participation Improves Environmental Decision Making*. <u>http://co-seed.eu/assets/files/</u><u>Q2MDFfHsM6-how-public-participation-improves-environmental-decision-makingpdf.pdf</u>.
- Cronin and Kennedy. 1999. *The Riverkeepers: Two Activists Fight to Reclaim Our Environment as a Basic Human Right.* New York: Touchstone.
- Daly. 2012. "Constitutional Protection of Environmental Rights." *International Journal for Peace Studies* 17 (2): 71-80. https://www.gmu.edu/programs/icar/ijps/Vol17_2/DalyConstitutionalProtection.pdf.
- Darbishire, Helen, and Toby Mendel. 2010. "RTI Legislation Rating Methodology." Access Info Europe and the Centre for Law and Democracy. <u>http://www.law-democracy.org/wp-content/uploads/2010/09/Indicators.final_.pdf</u>.

Annex I: References Cited

- Davis, Crystal, Lauren Williams, Sarah Lupberger, and Florence Daviet. 2013. Assessing Forest Governance: The Governance of Forests Initiative Indicator Framework. Washington, D.C.: World Resources Institute. <u>http://www.wri.org/publication/assessing-forest-governance</u>.
- Dernbach, John C., ed. 2012. *Acting as If Tomorrow Matters: Accelerating the Transition to Sustainability*. Washington, D.C.: Environmental Law Institute.
- Dimba, Mukelani. 2008. "Access to Information as a Tool for Socio-Economic Justice." *Pambazuka News*, April 8. <u>http://pambazuka.org/en/category/comment/47179</u>.
- Economy, Elizabeth. 2006. "Environmental Governance: The Emerging Economic Dimension." *Environmental Politics* 15 (2): 171–89. doi:10.1080/09644010600562310.

Environmental Democracy Index. 2015a. "The Map." https://environmentaldemocracyindex.org/map#all.

- ———. 2015b. "Guideline 12: Public Participation in Review." <u>https://environmentaldemocracyindex.org/map#2/12.</u>
- -----. n.d. "EDI Infographic." https://environmentaldemocracyindex.org/sites/default/files/files/EDI_Infographic.pdf.
- Environmental Rights Database. 2015. "Obligation to Facilitate Public Participation in Environmental Decision-Making." *Environmental Rights Database*. <u>http://environmentalrightsdatabase.org/category/obligation-to-facilitate-public-participation-in-environmental-decision-making/</u>.
- Epremian, Levon, Paivi Lujala, and Carl Bruch. 2016. "High-Value Natural Resources Revenues and Transparency: Accounting for Revenues and Peace." *Oxford Research Encyclopedia of Politics*. Oxford University Press. <u>doi:10.1093/acrefore/9780190228637.013.21</u>.
- Ernst & Young LLP. 2013. *Disclosing Government Payments: Implications for the Oil and Gas Industry*. Ernst & Young LLP. <u>http://www.ey.com/Publication/vwLUAssets/EY_Disclosing_government_payments_for_natural_resource_extraction/\$FILE/EY-Disclosing-government-payments.pdf</u>.
- Extractive Industries Transparency Initiative. 2016. "Frequently Asked Questions: What Does It Mean to Be EITI Compliant." <u>https://eiti.org/faqs#EITICompliant</u>.
- Feris, Loretta. 2017. "Constitutional Environmental Rights: An Under-Utilized Resource." South African Journal on Human Rights 24 (1): 29-49.
- Ferris, Richard J., and Hongjun Zhang. 2003. "Reaching out to the Rule of Law: China's Continuing Efforts to Develop an Effective Environmental Law Regime." *William & Mary Bill of Rights Journal* 11: 569.
- Foti, Joseph, and Lalanath de Silva. 2010. A Seat at the Table: Including the Poor in Decisions for Development and *Environment*. Washington, D.C.: World Resources Institute. <u>http://www.wri.org/publication/seat-table</u>.
- Foti, J., L. de Silva, H. McGray, L. Shaffer, J. Talbot, and J. Werksman. 2008. *Voice and Choice: Opening the Door to Environmental Democracy*. Washington, D.C.: World Resources Institute.
- Freeman, J., and L. I. Langbein. 2000. "Regulatory Negotiation and the Legitimacy Benefit." *New York University Environmental Law Journal* 9: 60-151.
- Gauthier, Mario, and Louis Simard. 2009. "Public Participation in Strategic Environmental Assessment (SEA): Critical Review and the Quebec Approach." PowerPoint Presentation presented at the Environmental Evaluators Network Forum, Ottawa, CA, September 22. <u>http://www.environmentalevaluators.net/wp-content/</u> <u>uploads/2011/01/Public-Participation-in-Strategic-Environmental-Assessment-SEA.pdf</u>.
- Ginsburg, Tom. 2008. "The Citizen as Founder: Public Participation in Constitutional Approval." *Temple Law Review* 81 (2): 361–82.
- Green, Jarded. 2009. "Government 2.0: EPA's MyEnvironment." *The Dirt: Uniting the Built and Natural Environments* (blog), September 8. <u>http://dirt.asla.org/2009/09/08/government-2-0-epas-myenvironment/</u>.
- Harrison, James. 2011. "Human Rights Measurement: Reflections on the Current Practice and Future Potential of Human Rights Impact Assessment." Journal of Human Rights Practice 3 (2): 162-187. doi:10.1093/jhuman/hur011.
- Henniger, Norbert, Elena Petkova, Crescencia Maurer, and Fran Irwin. 2002. *Closing the Gap: Information, Participation, and Justice in Decision-Making for the Environment*. Washington, D.C.: World Resources Institute. <u>http://www.wri.org/sites/default/files/pdf/closing_the_gap.pdf</u>.

- Hildén, Mikael, and Eeva Furman. 2002. Towards Good Practices for Public Participation in the Asia-Europe Meeting Process. In *The New "Public": The Globalization of Public Participation*, 137–46. Washington, D.C.: Environmental Law Institute. <u>http://www.eli.org/sites/default/files/eli-pubs/d1205.pdf</u>.
- Hubert, Don, and Rob Pitman. 2017. *Past the Tipping Point? Contract Disclosure within EITI*. Natural Resource Governance Institute. <u>https://resourcegovernance.org/sites/default/files/documents/past-the-tipping-point-contract-disclosure-within-eiti-web.pdf</u>.
- IFC (International Finance Corporation). 2007. *Stakeholder Engagement: A Good Practices Handbook for Companies Doing Business in Emerging Markets*. Washington, D.C. <u>https://www.scribd.com/document/16903354/Stakeholder-Engagement-A-Good-Practice-Handbook-for-Companies-Doing-Business-in-Emerging-Markets-May-2007#fullscreen</u>.

International Labour Organization. n.d. NATLEX. https://www.ilo.org/dyn/natlex/natlex4.detail?p_lang=&p_isn=94396.

- International Union for the Conservation of Nature. 2015. Le RERAO Diffuse Sa Première Émission Régionale Sur Le Thème Du Changement Climatique. December 4. <u>https://www.iucn.org/fr/nouvelles_homepage/nouvelles_par_region/afrique_centrale_et_de_l_ouest_news/?22247/Le-RERAO-diffuse-sa-premiere-emission-regionale-sur-le-theme-du-changement-climatique.</u>
- Jensen, Carsten. 2011. "Less Bad than Its Reputation: Social Spending as a Proxy for Welfare Effort in Cross-National Studies." *Journal of Comparative Policy Analysis: Research and Practice* 13 (3): 327–340. doi:10.1080/13876988.201 1.565917.
- Jensen, David, and Nicolás Cisneros. 2015. Background Paper on Lessons Learned: Natural Resources, Peacebuilding, and Statebuilding in Africa. United Nations Environment Programme.
- Kaufmann, Daniel. 2015. "Evidence-Based Reflections on Natural Resource Governance and Corruption in Africa." In *Africa at a Fork in the Road: Taking Off or Disappointment Once Again*, 239–260. New Haven, CT: Yale Center for the Study of Globalization. <u>http://www.ycsg.yale.edu/assets/downloads/africa.pdf</u>.
- Kawamoto, K. 2012. "Diamonds in War, Diamonds for Peace: Diamond Sector Management and Kimberlite Mining in Sierra Leone." In *High-Value Resources and Peacebuilding*, edited by P. Lujala and S. A. Rustad. London: Routledge.
- Kellert, Stephen R., Jai N. Mehta, Syma A. Ebbin, and Laly L. Lichtenfeld. 2000. "Community Natural Resource Management: Promise, Rhetoric, and Reality." *Society & Natural Resources* 13 (8): 705-715. doi:10.1080/089419200750035575.
- Kurukulasuriya, Lal, Rachel Schutte, Caroline Haywood, and Laura Rhodes. 2013. The Role of Legal Instruments to Support Green Low-Emission and Climate-Resilient Development: A Guidebook on Assessing, Selecting and Implementing Legal Instruments. Nairobi, Kenya: UNION Publishing Services Section. <u>http://www.undp.org/</u> content/dam/undp/library/Environment%20and%20Energy/Climate%20Strategies/LECRDS_Legal_Guide.pdf.
- Last Great Ape Organization Cameroon. 2016. "Home." January 13. http://www.laga-enforcement.org/.
- Lerner, Michael. 2014. Dopportunity, Risk, and Public Acceptability: The Question of Shale Gas Exploitation in Québec. *Issues in Energy and Environmental Policy* 16 (Oct.). Ann Arbor, MI: Center for Local, State, and Urban Policy and the Gerald R. Ford School of Public Policy. doi:10.13140/RG.2.1.2878.0967.
- LIKUMI. 2009. *Latvijas Vēstnesis* 30 (4016). <u>https://likumi.lv/ta/en/id/188150-regulations-regarding-the-requirements-with-respect-to-environmental-monitoring-and-the-procedures-for-performance-thereof-the-creation-of-the-register-of-polluting-substances-and-public-availability-of-information.</u>
- Luchette, Joseph A., and Tom Crawford. 2008. "A Public Participation GIS Application for Citizen-based Watershed Monitoring in the Pamlico-Tar River Basin, North Carolina." *Southeastern Geographer* 48 (2): 184-200. <u>https://muse.jhu.edu/article/249532/summary</u>.
- Maria Lee, Chiara Armeni, Sarah Chaytor Javier de Cendra, Catherine Redgwell Mark Masllin, and Yvonne Rydin. 2012. "Public Participation and Climate Change Infrastructure." *Journal of Environmental Law* 25 (1): 33–62.
- May, J. 2013. "Constitutional Directions in Procedural Environmental Rights." *Journal of Environmental Law and Litigation* 28: 27-58.
- May, James R., and Erin Daly. 2014. Global Environmental Constitutionalism. Cambridge University Press.
- Mirkovic, Milada, and Andrej Klemenc. 1995. "Slovenia." In Status of Public Participation Practices in Environmental Decisionmaking in Central and Eastern Europe: Case Studies of Albania, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, FYR Macedonia, Poland, Romania, Slovak Republic, 277–99. Budapest, Hungary:

Annex I: References Cited

Regional Environmental Center for Central and Eastern Europe. <u>http://pdc.ceu.hu/archive/00002330/01/</u> <u>publicparticippractices.pdf</u>.

- Munden Project. 2012. *The Financial Risks of Insecure Land Tenure: An Investment View*. Washington, D.C.: Rights and Resources Initiative. <u>http://www.rightsandresources.org/documents/files/doc_5715.pdf</u>.
- Natural Resource Governance Institute. 2013. "Sierra Leone." <u>http://www.resourcegovernance.org/our-work/</u> <u>country/sierra-leone</u>.
- OAS (Organization of American States). n.d. "Model Inter-American Law on Access to Information."
- Odette, V.M. 2005. "Public Participation Applied to the Environmental Planning," *Geo-spatial Information Science* 8 (2): 152-153. doi:10.1007/BF02826857.
- Odparlik, Lisa F., and Johann Köppel. 2013. [Access to Information and the Role of Environmental Assessment Registries for Public Participation.] *Journal of Impact Assessment and Project Appraisal* 31 (4): 324-331.
- Odugbemi, Sina, and Taeku Lee, eds. 2011. Accountability through Public Opinion: From Inertia to Public Action. Washington, D.C.: World Bank. <u>https://openknowledge.worldbank.org/bitstream/handle/10986/2296/616390PUB0Acco1351B0Extop0ID0185050.pdf;sequence=1</u>.
- OECD (Organization for Economic Co-operation and Development). n.d. "Links to Country-Specific PRTR websites and International Organizations." <u>http://www.prtr-rc.fi/countries_e.php</u>.
- OGP (Open Government Partnership). 2016. "Issue Brief: Disclosing Contracts in Natural Resources." <u>https://www.opengovpartnership.org/resources/issue-brief-disclosing-contracts-natural-resources</u>.
- Open Contracting Partnerhip. 2016. "Promises are vanity, contracts are reality, transparency is sanity." <u>https://www.open-contracting.org/wp-content/uploads/2016/02/OCP2016_EITI_brief.pdf</u>
- Open Society Justice Initiative. 2016. "List of Countries with Access to Information (ATI) Provisions in their National/ Federal Laws or Actionable Decrees, and Dates of Adoption & Significant Amendments." <u>http://www.right2info.org/resources/publications/countrieswithatiprovisions113Sept2016.pdf</u>.
- Percival, Robert V. 2008. "The Challenge of Chinese Environmental Law." International Environmental Law Committee Newsletter 10 (4): 2–7.
- Percival, Robert V., Jolene Lin, and William Piermattei. 2014. *Global Environmental Law at a Crossroads.* Edward Elgar Publishing.
- Plater, Zygmunt J.B. 2005. "Dealing with Dumb and Dumber: The Continuing Mission of Citizen Environmentalism." *Journal of Environmental Law & Litigation* 20: 9-47.
- Pomeroy, Robert S. 1995. "Community-Based and Co-Management Institutions for Sustainable Coastal Fisheries Management in Southeast Asia." *Ocean & Coastal Management* 27 (3): 143-162. <u>doi:10.1016/0964-5691(95)00042-9</u>.
- Registrul de Stat al Acetlor Juridice al Republicii Moldova. 2013. *Monitorul Oficial* Nr. 125-129: 400. <u>http://lex.justice.</u> <u>md/index.php?action=view&view=doc&lang=1&id=348205</u>.
- Rich, Eddie, and Negbalee Warner. 2012. "Addressing the Roots of Liberia's Conflict through the Extractive Industries Transparency Initiative." In *High-Value Natural Resources and Post-Conflict Peacebuilding*, edited by P. Lujala and S. A. Rustad, 201-9. London: Routledge. <u>https://environmentalpeacebuilding.org/assets/Documents/</u> <u>LibraryItem_000_Doc_096.pdf</u>.
- Right2Info. 2012. "Constitutional Protections of the Right to Information." Last modified January 9, 2012. <u>https://www.right2info.org/archived-content/constitutional-protections</u>.
- Ross, Michael L. 2004. "What Do We Know about Natural Resources and Civil War?" *Journal of Peace Research* 41 (3): 337-356.

———. 2015. "What Have We Learned about the Resource Curse?" *Annual Review of Political Science* 18: 239–259. doi:10.1146/annurev-polisci-052213-040359.

Rustad, Siri A., Paivi Lujala, and Philippe Le Billon. 2012. "Building or Spoiling Peace? Lessons from the Management of High-value Natural Resources." In *High-Value Natural Resources and Peacebuilding*, edited by P. Lujala and S. A. Rustad. London: Routledge.

- Seitzinger, Michael V. and Kathleen Ann Ruane. 2015. "Conflict Minerals and Resource Extraction: Dodd-Frank, SEC Regulations, and Legal Challenges." CRS Report 7–5700. Washington, D.C.: Congressional Research Service. https://www.fas.org/sgp/crs/misc/R43639.pdf.
- Shelton, Dinah. 1991. "Human Rights, Environmental Rights, and the Right to Environment." *Stanford Journal of International Law* 28:103.
- Sors, Julie Catherine. 2001. "Public Participation in Local Agenda 21: A Review of Traditional and Innovative Tools." Working Paper 17.2001. Sustainability Indicators and Environmental Evaluation. Milan: Fondazione Eni Enrico Mattei. <u>http://www.uhu.es/dege/ld/documents/lesson7_8/al21.pdf</u>.
- Steinhardt, H. Christoph, and Fengshi Wu. 2016. "In the Name of the Public: Environmental Protest and the Changing Landscape of Popular Contention in China." *The China Journal* 75 (January): 61-82. <u>doi:10.1086/684010</u>.
- Sullivan, R., and A. Gouldson. 2007. "Pollutant Release and Transfer Registers: Examining the Value of Government led Reporting on Corporate Environmental Performance." *Corporate Social Responsibility and Environmental Management* 14 (5): 263-273.
- Teel, Julie. 2001. "International Environmental Impact Assessment: A Case Study in Implementation." *Environmental Law Review* 31 (3): 10291–10312.
- Therivel, Riki. 2010. Strategic Environmental Assessment in Action. 2d ed. Earthscan.
- Troell, Jessica, Angela Cassar, and Carl Bruch. 2005. "Transboundary Environmental Impact Assessment as a Tool for Promoting Public Participation in International Watercourse Management." In *Enhancing Participation and Governance in Water Resource Management: Conventional Approaches and Information Technology*, edited by Libor Jansky and Juha I. Uitto. United Nations University Press.
- Umwelt Bundesamt n.d. "Links International." https://www.thru.de/3/thrude/links/links-international/.
- United Nations. 2011. "General Comment No. 34. Article 19: Freedoms of Opinion and Expression." CCPR/C/GC/34. September 12. <u>http://www2.ohchr.org/english/bodies/hrc/docs/GC34.pdf</u>.
- ———. 2012. "The Future We Want." Conference in Rio de Janeiro, Brazil, 20-22 June 2012. <u>undocs.org/A/</u> <u>CONF.216/L.1</u>.
- UN Economic and Social Council. 2003. "General Comment No. 15: The Right to Water (Arts. 11 and 12 of the Covenant)." E/C.12/2002/11. undocs.org/E/C.12/2002/11.
- UN Economic Commission for Latin America and the Caribbean. 2013. Access to Information, Participation, and Justice in Environmental Matters in Latin America and the Caribbean: Situation, Outlook, and Examples of Good Practice. Environment and Development Series 151. Santiago, Chile: United Nations. <u>http://repositorio.cepal.org/</u> <u>bitstream/handle/11362/21758/S1420901_en.pdf?sequence=6</u>.
- UNECE (UN Economic Commission for Europe). 2000. *Public Participation in Making Local Environmental Decisions: The Aarhus Convention Newcastle Workshop Good Practice Handbook*. London: Department of the Environment, Transport and the Regions. <u>http://www.unece.org/env/pp/newcastle.handbook.html</u>.
 - ——. 2014a. *The Aarhus Convention: An Implementation Guide.* 2d ed. United Nations Publication. <u>https://www.unece.org/fileadmin/DAM/env/pp/Publications/Aarhus_Implementation_Guide_interactive_eng.pdf</u>.
- ———. n.d.a."2014 National Implementation Reports by Parties." <u>https://www.unece.org/env/pp/reports_trc_implementation_2014.html</u>.
- ———. n.d.b."2017 National Implementation Reports by Parties." <u>http://www.unece.org/env/pp/prtr_reports_trc_implementation_2017</u>.
- UNEP (UN Environment Programme). 2006. Manual on Compliance with and Enforcement of Multilateral Environmental Agreements. Nairobi, Kenya.
 - -——2010. "Guidelines for the Development of National Legislation on Access to Information, Public Participation, and Access to Justice in Environmental Matters." Adopted in UNEP Governing Council Decision SS.XI/5.
- ———. 2015. Putting Rio Principle 10 into Action: An Implementation Guide. Nairobi: Kenya.
- ———. 2018. Assessing Environmental Impacts: A Global Review of Legislation. Nairobi: UN Environment. <u>http://wedocs.</u> unep.org/handle/20.500.11822/22691.

Annex I: References Cited

UNEP Governing Council. 2013. "Decision 27/9: Advancing Justice, Governance and Law for Environmental Sustainability." <u>http://www.unep.org/delc/Portals/24151/Documents/Decisisions27-9Advancing_Justice_Governance&Law.pdf</u>.

UNGA (United Nations General Assembly). 1992. "The Rio Declaration on Environment and Development." Conference in Rio de Janeiro, Brazil, 3-14 June 1992. (A/CONF.151/26 Vol. I). <u>http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm</u>.

- ——. 2018. Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment, 24 January 2018. (A/HRC/37/59.)
- UN Human Rights Council. 2008. *Report of the Special Rapporteur on the Adverse Effects of the Illicit Movement and Dumping of Toxic and Dangerous Products and Wastes on the Enjoyment of Human Rights, Okechukwu Ibeanu. A/* HRC/7/21.

———. 2011. General Comment 34: Article 19: Freedoms of Opinion and Expression. CCPR/C/GC/34. September 12. <u>https://www2.ohchr.org/english/bodies/hrc/docs/GC34.pdf</u>.

- ——. 2015. "Report of the Independent Expert on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment, John H. Knox." <u>http://srenvironment.org/wp-content/uploads/2015/07/A-HRC-28-61-_English-final.doc</u>.
- UNITAR (United Nations Institute for Training and Research). 2017. "Collection of International Guidance Materials on Pollutant Release and Transfer Registers" Chemical and Waste Management Programme.
- UNSC (UN Security Council). 2004. "The Rule of Law and Transitional Justice in Conflict and Post-Conflict Societies, Report of the Secretary-General." S/2004/616. United Nations Security Council. <u>undocs.org/S/2004/616</u>.
- USAID (United States Agency for International Development). 2012. *Philippines CBNRM Stocktaking Report*. <u>https://</u> <u>rmportal.net/frame/communities/cbnrm-community/resources/PHILIPPINES-STOCKTAKING-JUNE-2012-FINAL.</u> <u>pdf/view</u>.
- ———. 2013. A Global Assessment of Community Based Natural Resource Management: Addressing the Critical Challenges of the Rural Sector. Washington, D.C. <u>file:///C:/Users/bruch/Downloads/CBNRM%20ASSESSMENT%20FINAL%20</u> <u>May%202013-1.pdf</u>.
- USEPA (U.S. Environmental Protection Agency). 1996. "Dry Cleaning Sector Compliance Strategy." 305-F-96-003. https://nepis.epa.gov/Exe/ZyNET.exe/91012HOB.TXT?ZyActionD=ZyDocument&Client=EPA&Index-=1995+Thru+1999&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&-File=D%3A%5Czyfiles%5CIndex%20Data%5C95thru99%5CTxt%5C00000032%5C91012HOB.txt&User=ANON-YMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL.
- ———. 2015. "Learn More About ECHO." August 11. <u>http://echo.epa.gov/resources/general-info/learn-more-about-echo</u>.
- Wang, Shekun. 2017. "Review of the Legislation on Public Participation in EIA in China: From Disorder to Normalization." In *Environmental Policy and Governance in China*, edited by Hideki Kitagawa, 145-158. Springer.
- Wang, YaNan. 2012. "Public Participation in EIA, SEA, and Environmental Planning (China)." Comparative Policy and Practice Study 3. Beijing, China: EU-China Environmental Governance Programme. <u>http://www.ecegp.com/chinese/DataBase/UploadFile/20150605144418910.pdf</u>.
- Wates, Jeremy. 2005. "The Aarhus Convention: A Driving Force for Environmental Democracy." Journal of European Environmental and Planning Law 2: 2-11.
- Wong, Sue-Lin. 2017. "China Probe Uncovers Environment Breaches at Two-thirds of Firms Ministry." Reuters, April 20. <u>https://www.reuters.com/article/us-china-environment/china-probe-uncovers-environment-breaches-at-two-thirds-of-firms-ministry-idUSKBN17N07Z</u>.
- World Bank. 2009. "Promoting Active Citizenry—Advocacy and Participation in Decision Making." <u>http://siteresources.</u> worldbank.org/INTRANETENVIRONMENT/Resources/GuidanceNoteonAdvocacyandDecisionMaking.pdf.

——. 2012. Implementing Right to Information: A Case Study of India. <u>http://siteresources.worldbank.org/</u> <u>PUBLICSECTORANDGOVERNANCE/Resources/285741-1343934891414/8787489-1344020463266/RTI-CS-India-RevFin-LJ.pdf</u>.

- World Bank Group. 2007. "Environmental, Health, and Safety Guidelines." *International Finance Corporation*. <u>https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/policies-standards/ehs-guidelines</u>.
- World Resources Institute and The Access Initiative. 2015. "Background and Methodology." *Environmental Democracy Index*. <u>http://www.environmentaldemocracyindex.org/about/background_and_methodology</u>.
- Wu, Fengshi. 2016. "In the Name of the Public: New Environmental Protests in China." Presented at The Changing Landscape of Environmental Public Participation and Protest in China, Washington, D.C., March 23. <u>https://www. youtube.com/watch?v=8X2HOB5kU4k</u>.
- Yang, Tseming, and Robert V. Percival. 2009. "The Emergence of Global Environmental Law." *Ecology Law Quarterly* 36: 615.
- Yang, Yi. 2014. "Xinhua Insight: Draft Law Ups Punishment for Environmental Wrongdoing." *English.news.cn*, April 21. http://news.xinhuanet.com/english/indepth/2014-04/21/c_133279232.htm.
- Zomer, Alisa. 2015. "Environmental Democracy Index (EDI)." *News & Insights: Indicators in Practice* (blog), May 28. <u>http://www.epi.yale.edu/indicators-in-practice/environmental-democracy-index-edi</u>.

Chapter 4 (Rights)

- African Commission on Human and Peoples' Rights. 2012. "Model Law on Access to Information for Africa." <u>http://www.achpr.org/files/news/2013/04/d84/model_law.pdf</u>.
- Alforte, Andrea, Joseph Angan, Jack Dentith, Karl Domondon, Lou Munden, Sophia Murday, and Leonardo Pradela.. 2014. *Communities as Counterparties: Preliminary Review of Concessions and Conflict in Emerging and Frontier Market Concessions*. Washington, D.C.: Rights and Resources Initiative. <u>http://www.rightsandresources.org/wp-content/uploads/Communities-as-Counterparties-FINAL_Oct-21.pdf</u>.
- Annan, Kofi. 1998. Partnerships for Global Community: Annual Report on the Work of the Organization. New York: United Nations.
- Ansari, Abdul Haseeb, Muhamad Hassan Bin Ahmad, and Sodiq Omoola. 2017. "Alternative Dispute Resolution in Environmental and Natural Resource Disputes: National and International Perspectives." *Journal of the Indian Law Institute* 59:26-56.
- Anton, Don, and Dinah Shelton. 2011. "Problems in Environmental Protection and Human Rights: A Human Right to the Environment." *GW Law Faculty Publications & Other Works.* 1048.
- Association of Southeast Asian Nations (ASEAN) 2012. "ASEAN Human Rights Declaration." <u>http://www.mfa.go.th/</u> <u>asean/contents/files/other-20121217-165728-100439.pdf</u>.
- Ayana, James and Siegfried Wiessner. 2007. "The UN Declaration on the Rights of Indigenous Peoples: Towards Reempowerment." *JURIST*, October 3. <u>http://www.jurist.org/forum/2007/10/un-declaration-on-rights-of-indigenous.php</u>.
- Banisar, David, Sejal Parmar, Lalanath de Silva, and Carole Excell. 2012. "Moving from Principles to Rights: Rio 2012 and Access to Information, Public Participation, and Justice." *Sustainable Development Law & Policy* 7 (3): 8-14, 51. <u>https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2164685</u>.
- Bearer, Cynthia F. 1995. "Environmental Health Hazards: How Children are Different." *The Future of Children* 5 (2): 11-26.
- Bell, Ruth Greenspan, and Urvashi Narain. 2006. "Who Changed Delhi's Air?" *Economic and Political Weekly* 41 (16): 1584-1588. <u>https://www.researchgate.net/publication/262126109_Who_Changed_Delhi%27s_Air</u>.
- Blackman, Allen, Leonardo Corralc, Eirivelthon Santos Limad, and Gregory P. Asnere. 2017. "Titling Indigenous Communities Protects Forests in the Peruvian Amazon." *Proceedings of the National Academy of Sciences of the United States of /America* 114 (16): 4123-4128. <u>http://www.pnas.org/content/114/16/4123.full</u>.

Annex I: References Cited

Boyd, David. 2011. "The Implicit Constitutional Right to a Healthy Environment." *Review of European Community and International Environmental Law* 20 (2): 171-179. <u>http://davidrichardboyd.com/wp-content/uploads/Implicit-R2HE.</u> <u>pdf</u>.

- ———. 2013. "The Effectiveness of Constitutional Rights." Yale UNITAR Workshop. <u>https://environment.yale.edu/</u> content/documents/00003438/Boyd-Effectiveness-of-Constitutional-Environmental-Rights.docx?1389969747.
- Boyd, David R. 2018. "Catalyst for Change: Evaluating Forty Years of Experience in Implementing the Right to a Healthy Environment." *In The Human Right to a Healthy Environment*, edited by John H. Knox, 17-41. Cambridge: Cambridge UP.
- Boyle, Alan. 2007. "Human Rights or Environmental Rights? A Reassessment." *Fordham Environmental Law Review* 18 (3): 471-511. <u>https://www.jstor.org/stable/44175132?seq=1#page_scan_tab_contents</u>.
- Bruch, Carl, Wole Coker, and Chris VanArsdale. 2007. *Constitutional Environmental Law: Giving Force to Fundamental Principles in Africa*. 2nd Ed. Washington, D.C.: Environmental Law Institute.
- Burns, Kyle. 2016. "Constitutions & the Environment: Comparative Approaches to Environmental Protection and the Struggle to Translate Rights into Enforcement." *Georgetown Environmental Law Review*. <u>https://gelr.org/2016/11/12/constitutions-the-environment/</u>.
- Camarda, Agatino. 2013. *Recent Trends in Best Practices in Whistleblower Protection Legislation*. Transparency International.
- Cole, Luke and Sheila Foster. 2000. "From the Ground Up: Environmental Racism and the Rise of the Environmental Justice Movement." <u>https://www.epa.gov/environmentaljustice/environmental-justice-timeline</u>.
- Commission on Human Rights, Republic of the Philippines. 2018. "PHL at the Forefront of Seeking Climate Justice with CHR's Landmark Inquiry on the Effects of Climate Change to Human Rights." Press Release, March 28. <u>http://chr.gov.ph/phl-at-the-forefront-of-seeking-climate-justice/</u>.
- Cox, Rachel. 2018. "New Data Reveals 197 Land and Environmental Defenders Murdered in 2017." Global Witness (blog), February 2. <u>https://www.globalwitness.org/en-gb/blog/new-data-reveals-197-land-and-environmentaldefenders-murdered-2017/</u>.
- CPJ (Committee to Protect Journalists). 2018. "CPJ's Database of Attacks on the Press." <u>https://cpj.org/data/killed/</u> <u>murdered/?status=Killed&motiveConfirmed[]=Confirmed&type[]=Journalist&typeOfDeath[]=Murder&start_</u> <u>year=1992&end_year=2018&group_by=year</u>.
- Cutter, Susan L. 2012. "The Forgotten Casualties: Women, Children, and Environmental Change." In *Hazards Vulnerability and Environmental Justice*, edited by Susan L. Cutter. London: Routledge.
- Dadomo, Christian. 2004. "Principles of European Environmental Law." In *Journal of Environmental Law* 19 (1): 149-155. Groningen: Europa Law Publishing.
- Devine, Tom. 2016. "International Best Practices for Whistleblower Policies." *Government Accountability Project*. <u>https://www.whistleblower.org/international-best-practices-whistleblower-policies</u>.
- Diario Oficial de la Federacion. 2014. *Programa Hidrico Nacional 2014-2018*. <u>http://dof.gob.mx/nota_detalle.</u> <u>php?codigo=5339732&fecha=08/04/2014</u>.
- Diarra, M. 2006. Destauration de Denvironnement et Changements Sociaux de Genre. Presented at Conference of Study Results of Natural Resource Management Investments from 1980 to 2005 in Niger, Sept. 20-21. Comité Permanent Inter-etats de Lutte Contre la Sécheresse dans le Sahel.
- Dong, Shikui. 2017. "Environmental Struggles and Innovations in China." In *Environmental Sustainability from the Himalayas to the Oceans,* edited by Shikui Dong, Jayanta Bandyopadhyay, Sanjay Chaturvedi, 22-23. Switzerland: Springer International Publishing.
- Dupuy, Kendra. 2016. Email message to Environmental Law Institute, 3 November.

^{———. 2012}a. The Environmental Rights Revolution: A Global Study of Constitutions, Human Rights, and the Environment. Vancouver: UBC Press.

^{——. 2012}b. "The Constitutional Right to a Healthy Environment, Environment." *Environment*, July. <u>http://www.environmentmagazine.org/Archives/Back%20Issues/2012/July-August%202012/constitutional-rights-full.html</u>.

- Dupuy, Kendra, James Ron, and Aseem Prakash. 2016. "Hands Off My Regime! Governments' Restrictions on Foreign Aid to Non-Governmental Organizations in Poor and Middle-Income Countries." *World Development* 84 (Fall): 299-311. <u>http://www.sciencedirect.com/science/article/pii/S0305750X1530187X</u>.
- ———. 2017. "Across the Globe, Governments are Cracking down on Civic Organizations: This is Why." The Washington Post, July 5. <u>https://www.washingtonpost.com/news/monkey-cage/wp/2017/07/05/_trashed-</u> <u>4/?utm_term=.22dd97b47793</u>.
- ECHR (European Court of Human Rights). 2018. "Factsheet on the Environment and the European Convention on Human Rights." <u>https://www.echr.coe.int/Documents/FS_Environment_ENG.pdf</u>.
- ELAW (Environmental Law Alliance Worldwide). n.d. "ELAW at 25." https://www.elaw.org/.
- Environmental Rights Database. 2015. "Indian Minister of the Environment and Forests' Rejection of Application to Mine the Niyamgiri Hills in Odisha, India." <u>http://environmentalrightsdatabase.org/indian-minister-of-the-environment-and-forests-rejection-of-application-to-mine-the-niyamgiri-hills-in-odisha-india/</u>.
- EUFRA (European Union Agency for Fundamental Rights). 2018. *Handbook on European Union Non-discrimination Law*. <u>http://fra.europa.eu/en/publication/2018/handbook-european-law-non-discrimination</u>.
- Forest Peoples Programme. 2015a. "Indigenous Leaders in the Amazon Face Death Threats as Community Files Lawsuit against Peruvian Government for Violations of Their Land Rights." <u>http://www.forestpeoples.org/topics/</u> <u>rights-land-natural-resources/news/2016/05/indigenous-leaders-amazon-face-death-threats-commu.</u>

——. 2015b. "Peru's Failure to Address Indigenous Peoples' Land Struggle and Control Illegal Deforestation Exposes Empty Pledges of Its Government to Tackle Deforestation." <u>http://www.forestpeoples.org/topics/</u> agribusiness/news/2015/11/peru-s-failure-address-indigenous-peoples-land-struggle-and-control.

- G20 Anticorruption Working Group. 2012. Study on Whistleblower Protection Frameworks, Compendium of Best Practices and Guiding Principles for Legislation. Organisation for Economic Co-operation and Development.
- Gill, Gitanjali Nain. 2012. "Human Rights and the Environment in India: Access through Public Interest Litigation." *Environmental Law Review* 14 (3): 200-218. <u>http://journals.sagepub.com/doi/abs/10.1350/enlr.2012.14.3.158</u>.
- ———. 2013. "Access to Environmental Justice in India with Special Reference to National Green Tribunal: A Step in the Right Direction." *OIDA International Journal of Sustainable Development* 6 (4): 25-36.
- Global Witness. 2014. "Deadly Environment: The Dramatic Rise in Killings of Environmental and Land Defenders." April 15. <u>http://www.globalwitness.org/deadlyenvironment/</u>.
- -----. 2015. "How Many More?" April 20. <u>https://www.globalwitness.org/en/campaigns/environmental-activists/</u> <u>how-many-more/</u>
- ———. 2016. "On Dangerous Ground." June 20. <u>https://www.globalwitness.org/en/campaigns/environmental-activists/dangerous-ground/</u>.
- ———. 2017. "Defenders of the Earth." <u>https://www.globalwitness.org/en/campaigns/environmental-activists/</u> <u>defenders-earth/</u>.
- Government Accountability Project. 2017. "Nations with Dedicated Whistleblower Laws." <u>https://www.whistleblower.org/fast-facts</u>.
- *Greenwire*. 2017. "6 Activists Win Goldman Environmental Prize." April 24. <u>https://www.eenews.net/greenwire/stories/1060053471</u>.
- Grupo Asesor Internacional de Personas Expertas. 2017. Depresa de Violencia: El plan que asesinó a Berta Cáceres. <u>https://www.gaipe.net/wp-content/uploads/2017/10/Represa-de-Violencia-ES-FINAL-.pdf</u>.
- *The Guardian*. 2018. "Almost Four Environmental Defenders a Week Killed in 2017." February 2. <u>https://www.</u> <u>theguardian.com/environment/2018/feb/02/almost-four-environmental-defenders-a-week-killed-in-</u> <u>2017?CMP=share_btn_tw</u>.
- *The Guardian* and Global Witness. 2017. "Environmental and Land Defenders Killed in 2016: The Full List." July 13. <u>https://www.theguardian.com/environment/2017/jul/13/environmental-and-land-defenders-killed-in-2016-the-full-list</u>.
- Hart, H. L. A. 2012. *The Concept of Law*, 3rd ed. Claredon Law Series. Oxford University Press. <u>https://books.goo-gle.de/books?hl=en&lr=&id=hC0UDAAAQBAJ&oi=fnd&pg=PP1&dq=hierarchy+of+laws+constitutions+stat-</u>

```
Annex I: References Cited
```

utes&ots=MD9bBEYzBA&sig=zFlnmWu6AJJplWfVqgsoOcnxG7w#v=onepage&q=hierarchy%20of%20laws%20 constitutions%20statutes&f=false.

- Harutyunyan, Khachik. 2015. Why Whistleblowing Should Be Properly Legislated? Transparency International Armenia.
- Hill, Barry. 2015. *Environmental Justice: Legal Theory and Practice*, 3rd ed. Washington, D.C.: Environmental Law Institute.
- Hohfeld, Wesley N. 1913. "Some Fundamental Legal Conceptions as Applied in Judicial Reasoning." *The Yale Law Journal* 23 (1): 16-59. <u>https://www.jstor.org/stable/785533?seq=1#page_scan_tab_contents</u>.
- IACHR (Inter-American Commission on Human Rights). 1997. *Report on the Situation of Human Rights in Ecuador*. April 24. OEA/Ser.L/V/II.96, Doc. 10 rev. 1.
- IDLO (International Development Law Organization). 2014. *Doing Justice to Sustainable Development Integrating the Rule of Law into the Post-2015 Development Agenda*. Rome, Italy.
- Indian Bar Association. 2013. *Constitutional Provisions for the Protection of Environment with Relevant Case Laws*. <u>https://www.indianbarassociation.org/wp-content/uploads/2013/02/environmental-law-article.pdf</u>.
- Kaniaru, Donald. 2011-2012. "Environmental Courts and Tribunals: The Case of Kenya." *Pace Environmental Law Review* 29:566.
- Kelsen, Hans. 2005. *General Theory of Law and State*. New York: Routledge. <u>https://www.taylorfrancis.com/</u> <u>books/9781351517997</u>.
- KEWASNET. 2017. *CSO Annual Water and Sanitation Performance Report Kenya*. Nairobi, Kenya. <u>https://washwatch.org/uploads/filer_public/cd/28/cd289c46-e2c6-4bf4-8974-216d7d501862/cso_annual_water_and_sanitation_performance_report_kewasnet_kenya_2017.pdf</u>.
- Knox, John. 2012. Report of the Independent Expert on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment. A/HRC/22/43. UN Human Rights Council.
- Kotzé, Louis J. and Anél du Plessis. 2010. "Some Brief Observations on Fifteen Years of Environmental Rights Jurisprudence in South Africa." *Journal of Court Innovation* 3 (1): 157-176.
- Lakhani, Nina. 2016. "Berta Caceres Murder: International Lawyers Launch New Investigation." *The Guardian*, Sept. 15. <u>https://www.theguardian.com/world/2016/nov/15/berta-caceres-murder-honduras-international-investigation</u>.
- LandMark. 2016. "Map National Level Indicators of the Legal Security of Indigenous and Community Lands, Indigenous, Legal Status." *LandMark Global Platform of Indigenous and Community Lands*. <u>http://www.landmarkmap.org/map/#x=77.54&y=7.26&l=3</u>.
- Landrigan, Philip J. et al. 2017. "The Lancet Commission on pollution and health." *The Lancet* 391 (10119): 462-512. doi:10.1016/S0140-6736(17)32345-0.
- Law, David S. and Mila Versteeg. 2011. "The Evolution and Ideology of Global Constitutionalism." *California Law Review* 99 (5): 1163-1254. <u>https://scholarship.law.berkeley.edu/cgi/viewcontent.</u> <u>cgi?article=1027&context=californialawreview</u>.
- -----. 2012. "The Declining Influence of the United States Constitution." New York University Law Review 87 (3): 762-858. <u>http://www.nyulawreview.org/sites/default/files/pdf/NYULawReview-87-3-Law-Versteeg_0.pdf</u>.
- Lawrence, Peter. 2014. Justice for Future Generations: Climate Change and International Law. Cheltenham, U.K.: Edward Elgar Publishing.
- Lazarus, Richard. 2004. The Making of Environmental Law. Chicago: University of Chicago Press.
- Lee, Jootaek. 2014. "Contemporary Land Grabbing: Research Sources and Bibliography." School of Law Faculty Publications No. 31. <u>http://lsr.nellco.org/nusl_faculty/31</u>.
- Lewis, Bridget. 2017. "Human Rights Duties towards Future Generations and the Potential for Achieving Climate Justice." *Netherlands Quarterly of Human Rights* 34 (3): 206-226. <u>http://journals.sagepub.com/doi/abs/10.1177/01</u> 6934411603400303.
- LiveLaw News Network. 2017a. "A First in India: Uttarakhand HC Declares Ganga, Yamuna Rivers As Living Legal Entities." March 20. <u>http://www.livelaw.in/first-india-uttarakhand-hc-declares-ganga-yamuna-rivers-living-legal-entities/</u>.

———. 2017b. "Uttarakhand HC Declares Air, Glaciers, Forests, Springs, Waterfalls Etc. As Legal Persons." April 1. <u>http://www.livelaw.in/uttarakhand-hc-declares-air-glaciers-forests-springs-waterfalls-etc-legal-persons/</u>.

Magraw, Daniel and Natalie Thomure. 2017. "Carta de Foresta: The Charter of the Forest Turns 800." *Environmental Law Reporter* 47 (11): 10934-10940. <u>https://elr.info/news-analysis/47/10934/carta-de-foresta-charter-forest-turns-800</u>.

- May, James. 2006. "Constituting Fundamental Environmental Rights Worldwide." *Pace Environmental Law Review* 23 (1): 113-182. <u>http://digitalcommons.pace.edu/pelr/vol23/iss1/5</u>.
- ———. 2017. "Subnational Environmental Constitutionalism and Reform in New York State." *Pace Law Review* 38 (1): 121-150.

May, James, and Erin Daly. 2014. *Global Environmental Constitutionalism*. New York: Cambridge University Press.

McAllister, Lesley. 2008. *Making Law Matter: Environmental Protection and Legal Institutions in Brazil*. Stanford, CA: Stanford University Press.

Mcgahuey, Michael, and Robert Winterbottom. 2007. "Transformational Development in Niger."

- Millennium Ecosystem Assessment. 2004. *Nature Supporting People: The Southern African Millennium Ecosystem Assessment*. <u>https://www.millenniumassessment.org/documents_sga/SAfMA_Integrated_Report.pdf</u>.
- Narain, Vrinda. 2009-2010. "Water as a Fundamental Right: A Perspective from India." *Vermont Law Review* 34:917-925.
- OAS (Organization of American States). 2016. [IACHR Condemns the Killing of Berta Cáceres in Honduras.] March 4. http://www.oas.org/en/iachr/media_center/PReleases/2016/024.asp.

——. n.d. "Model Inter-American Law on Access to Information." <u>http://www.oas.org/en/sla/dil/access_to_information_model_law.asp</u>.

- OECD (Organisation for Economic Co-operation and Development). 2011-2012. "G20 Anticorruption Action Plan, Protection of Whistleblowers." <u>https://www.oecd.org/g20/topics/anti-corruption/48972967.pdf</u>.
- OHCHR (UN Human Rights Council). 1982. CCPR General Comment No. 6: Article 6 (Right to Life). 30 April. <u>http://www.refworld.org/docid/45388400a.html</u>.
- ———. 2008a. "Frequently Asked Questions on Economic, Social, and Cultural Rights." Fact Sheet No. 33. <u>http://www.ohchr.org/Documents/Issues/ESCR/FAQ%20on%20ESCR-en.pdf</u>.
- ———. 2008b. Resolution 7/8. Mandate of the Special Rapporteur on the Situation of Human Rights Defenders. A/HRC/ RES/7/8 (27 March). <u>http://ap.ohchr.org/documents/E/HRC/resolutions/A_HRC_RES_7_8.pdf</u>.
- ———. 2010. Resolution 13/13. Protection of Human Rights Defenders. A/HRC/RES/13/13 (15 April). <u>http://ap.ohchr.</u> org/documents/dpage_e.aspx?si=A/HRC/RES/13/13.
- ———. 2011a. "Guiding Principles on Business and Human Rights." HR/PUB/11/04. <u>http://www.ohchr.org/</u> Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf.
- ———. 2011b. Resolution 16/5. Mandate of the Special Rapporteur on the Situation of Human Rights Defenders. A/HRC/ RES/16/5 (8 April). <u>http://ap.ohchr.org/documents/dpage_e.aspx?si=A/HRC/RES/16/5</u>.
- ———. 2013a. Report of the Special Rapporteur on the Rights of Indigenous Peoples, James Anaya. A/HRC/24/41. July 1. <u>http://www.ohchr.org/EN/HRBodies/HRC/RegularSessions/Session24/Documents/A-HRC-24-41_en.pdf</u>.
- ———. 2013b. Resolution 22/6. *Protecting Human Rights Defenders*. A/HRC/RES/22/6 (12 April). <u>http://ap.ohchr.org/</u> <u>documents/dpage_e.aspx?si=A/HRC/RES/22/6</u>.
- ———. 2013c. Report of the Independent Expert on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment, John H. Knox—Mapping Report. A/HRC/25/53 (30 December).

———. 2014a. Resolution 25/18. Mandate of the Special Rapporteur on the Situation of Human Rights Defenders. A/HRC/ RES/25/18 (11 April). <u>http://ap.ohchr.org/documents/dpage_e.aspx?si=A/HRC/RES/25/18</u>.

- ———. 2014b. Resolution 27/31. Civil Society Space. A/HRC/RES/27/631 (3 October). <u>http://ap.ohchr.org/documents/</u> <u>dpage_e.aspx?si=A/HRC/RES/27/31</u>.
- ———.2015a. Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment. A/HRC/31/53 (28 December 2015). <u>undocs.org/A/HRC/31/53</u>.

- ———. 2015b. Transforming Our World: Human Rights in the 2030 Agenda for Sustainable Development. <u>http://www.ohchr.org/Documents/Issues/MDGs/Post2015/HRAndPost2015.pdf</u>.
- ———. 2015c. Report of the Independent Expert on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment, John H. Knox—Compilation of Good Practices. A/HRC/28/61 (3 February 2015).
- ———. 2015d. Report of the Special Rapporteur on the Rights to Freedom of Peaceful Assembly and of Association, Maina *Kiai*. A/HRC/29/25 (28 April 2015). <u>https://undocs.org/A/HRC/29/25</u>.
- ——. 2016. Resolution 31. Protecting Human Rights Defenders, Whether Individuals, Groups or Organs of Society, Addressing Economic, Social, and Cultural Rights. A/HRC/31/L.28 (21 March 2016). <u>http://ap.ohchr.org/documents/</u> <u>dpage_e.aspx?si=A/HRC/RES/31/32</u>.
- ———. 2017. Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment. A/HRC/34/49 (19 January 2017). <u>undocs.org/A/HRC/34/49</u>.
- ———. n.d. "Categories of Good Practices." United Nations Human Rights Office of the High Commissioner. Accessed Dec. 6, 2017. <u>http://www.ohchr.org/EN/Issues/Environment/SREnvironment/Pages/GoodPracticesCategories.</u> <u>aspx</u>.
- Organisation for Economic Co-operation and Development. 2016. "Committing to Effective Whistleblower Protection." <u>https://www.oecd-ilibrary.org/governance/committing-to-effective-whistleblower-protection_9789264252639-en</u>.
- Padel, Felix, and Samarendra Das. 2006. "Anthropology of a Genocide: Tribal Movements in Central India against Over-Industrialisation." Presentation at the 2006 Annual Conference of the South Asia Anthropology Group. <u>http://sanhati.com/wp-content/uploads/2008/08/felixpadel-samarendradas.pdf.</u>
- Page, Edward. 2006. Climate Change, Justice and Future Generations. Cheltenham, U.K.: Edward Elgar Publishing.
- Permanent Mission of the Republic of Maldives to the United Nations Office at Geneva. 2008. "Human Rights and Climate Change." <u>http://www.maldivesmission.ch/index.php?id=68</u>.
- Prieur, Michel. 2012. "Non-Regression in Environmental Law." SAPIENS 5 (2): 53-56. http://sapiens.revues.org/1405.
- Reij, C. 2006. More Success Stories in Africa S Drylands than Often Assumed. Presented at Forum sur la Souveraineté alimentaire, Niamey, November 7-10. Réseau des Organisations Paysannes et de Producteurs Agricoles de II Afrique de II Ouest.
- Rights and Resources Initiative. 2015. Who Owns the Land, a Global Baseline of Formally-recognized Indigenous and Community Lands. Washington, D.C. <u>http://rightsandresources.org/wp-content/uploads/GlobalBaseline_web.pdf</u>.
- Robinson, Nicholas. 2015. "The Charter of the Forest: Evolving Human Rights in Nature." In *Magna Carta and the Rule of Law*, edited by Daniel Barstow Magraw et al., 311. Washington, D.C.: American Bar Association.
- Sands, Philippe and Jacqueline Peel. 2012. *Principles of International Environmental Law.* 3rd ed. Cambridge: Cambridge University Press.
- Sassman, Wyatt. 2015. "Environmental Justice as Civil Rights." *Richmond Journal of Law and the Public Interest* 18 (4): 441-459. <u>http://scholarship.richmond.edu/jolpi/vol18/iss4/4</u>.
- Shelton, Dinah. 2002. "Human Rights, Health & Environmental Protection: Linkages in Law & Practice." Background Paper. World Health Organization. <u>http://www.who.int/hhr/Series_1%20%20Sheltonpaper_rev1.pdf</u>.
- ———. 2010. "Developing Substantive Environmental Rights." Journal of Human Rights and the Environment 1 (1): 89-120. <u>http://ssrn.com/abstract=1576508</u>.
- Sijapati, Bijay Singh. 2013. "The Right to a Healthy and Clean Environment as a Human Right: An International Perspective on National Practices." *NJA Law Journal* 2013:65-89.
- South African Human Rights Commission. 2014. *Report on the Right to Access Sufficient Water and Decent Sanitation in South Africa*. <u>https://www.sahrc.org.za/home/21/files/FINAL%204th%20Proof%204%20March%20-%20Water%20 %20Sanitation%20low%20res%20(2).pdf</u>.
- South African National Planning Commission. 2012. *Our Future Make It Work. National Planning Commission National Development Plan 2030 Executive Summary.* <u>https://www.gov.za/sites/default/files/Executive%20Summary-NDP%202030%20-%20Our%20future%20-%20make%20it%20work.pdf</u>.

- Spijkers, Otto. 2017. "The Urgenda Decision of the Dutch District Court: Using Tort Law to Urge the State to Do More in Combatting Climate Change." *Rights!* May 22. <u>https://rightsblog.net/2017/05/22/the-urgenda-decision-of-the-dutch-district-court-using-tort-law-to-urge-the-state-to-do-more-in-combating-climate-change/</u>.
- Stickler, Mercedes. 2012. "Right to Trees and Livelihoods in Niger." *Focus on Land in Africa*. <u>http://www.focusonland.</u> <u>com/fola/en/countries/brief-rights-to-trees-and-livelihoods-in-niger/</u>.
- Taylor, Matthew. 2017. "2017 on Course to be the Deadliest on Record for Land Defenders." *The Guardian*, Oct. 11. <u>https://www.theguardian.com/environment/2017/oct/11/2017-deadliest-on-record-for-land-defenders-mining-logging</u>.
- The Equator Principles. 2013. "The Equator Principles." http://www.equator-principles.com/.
- The Extractive Industries Transparency Initiative. n.d. "The Global Standard for the Good Governance of Oil, Gas and Mineral Resources." <u>https://eiti.org/</u>.
- The Goldman Environmental Prize. 2015. [Berta Cáceres.] http://www.goldmanprize.org/recipient/berta-caceres/.
- The Right Livelihood Award. n.d. "Right Livelihood Award Laureates." http://www.rightlivelihoodaward.org/.
- Timbers, William H., and David A. Wirth. 1985. "Private Rights of Action and Judicial Review in Federal Environmental Law." *Cornell Law Review* 70 (3): 403-417. <u>https://heinonline.org/HOL/LandingPage?handle=hein.journals/</u> <u>clqv70&div=28&id=&page</u>.
- Transparency International. 2013. "International Principles for Whistleblower Legislation." <u>http://www.transparency.org/whatwedo/publication/international_principles_for_whistleblower_legislation</u>.
 - -----. 2014. Fighting Corruption in South Asia: Building Accountability.
- Tuholske, Jack. 2015. "U.S. State Constitutions and Environmental Protection: Diamonds in the Rough." *Widener Law Review* 21: 239-255. <u>http://widenerlawreview.org/files/2008/10/13-Tuholske.pdf</u>.
- UNDP (United Nations Development Programme). 2012. "Mainstreaming Human Rights in Development Policies and Programming: UNDP Experiences." <u>http://www.undp.org/content/undp/en/home/librarypage/democratic-governance/human_rights/mainstreaming-human-rights.html</u>.
- UNEP (United Nations Environment Programme). 2014. UNEP Compendium on Human Rights and the Environment. Nairobi, Kenya. <u>https://wedocs.unep.org/bitstream/handle/20.500.11822/9943/UNEP_Compendium_HRE.</u> pdf?sequence=1&isAllowed=y.
- UNGA (UN General Assembly). 1948. Universal Declaration of Human Rights, Resolution 3/217. A/RES/3/217 (10 December 1948). undocs.org/A/RES/3/217.
 - ——. 1972. Conference 48/14. *Report of the United Nations Conference on the Human Environment*. A/CONF.48/14/ Rev.1. <u>http://www.un-documents.net/aconf48-14r1.pdf</u>.
- ———. 1992a. UN Conference on Environment and Development, Agenda 21: Programme for Action on Sustainable Development. A/Conf.151/26 (3-14 June). <u>https://sustainabledevelopment.un.org/content/documents/Agenda21.</u> <u>pdf</u>.
- ———. 1992b. "The Rio Declaration on Environment and Development." Conference in Rio de Janeiro, Brazil, 3-14 June 1992. (A/CONF.151/26 Vol. I). <u>http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm</u>.
- ———. 1999. Resolution 53/144. Declaration on the Right and Responsibility of Individuals, Groups and Organs of Society to Promote and Protect Universally Recognized Human Rights and Fundamental Freedoms. A/RES/53/144 (8 March). <u>https://documents-dds-ny.un.org/doc/UNDOC/GEN/N99/770/89/PDF/N9977089.pdf?OpenElement.</u>
- ———. 2007. Resolution 61/295. United Nations Declaration on the Rights of Indigenous Peoples. A/RES/61/295 (13 September). <u>http://www.un-documents.net/a61r295.htm</u>.
- ———. 2009. Report of the OHCHR on the Relationship between Climate Change and Human Rights. A/HRC/I0/61 (15 January).
- ———. 2011. Resolution 66/164. Promotion of the Declaration on the Right and Responsibility of Individuals, Groups and Organs of Society to Promote and Protect Universally Recognized Human Rights and Fundamental Freedoms. A/ RES/66/164 (19 December). <u>http://www.un.org/en/ga/search/view_doc.asp?symbol=%20A/RES/66/164</u>.
- ———. 2014. Resolution 68/181. Promotion of the Declaration on the Right and Responsibility of Individuals, Groups and Organs of Society to Promote and Protect Universally Recognized Human Rights and Fundamental Freedoms:

Annex I: References Cited

Protecting Women Human Rights Defenders. A/RES/68/181 (18 December). <u>http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/68/181</u>.

——. 2015. Resolution 70/161. Human Rights Defenders in the Context of the Declaration on the Right and Responsibility of Individuals, Groups and Organs of Society to Promote and Protect Universally Recognized Human Rights and Fundamental Freedoms. A/RES/70/161 (17 December). <u>http://www.un.org/en/ga/search/view_doc.</u> asp?symbol=A/RES/70/161.

——. 2016. Report of the Special Rapporteur on the Situation of Human Rights Defenders. A/71/281. <u>http://www.un.org/ga/search/view_doc.asp?symbol=A/71/281</u>.

——. 2018a. Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment. A/HRC/37/59 (24 January). <u>http://ap.ohchr.org/documents/ dpage_e.aspx?si=A/HRC/37/59</u>.

———. 2018b. Resolution72/247. Twentieth Anniversary and Promotion of the Declaration on the Right and Responsibility of Individuals, Groups and Organs of Society to Promote and Protect Universally Recognized Human Rights and Fundamental Freedoms. A/RES/72/247 (25 January). <u>https://digitallibrary.un.org/record/1467235/</u> <u>files/A_RES_72_247-EN.pdf</u>.

United States Department of State Bureau of Diplomatic Security (OSAC). 2016. "Honduras 2016 Crime & Safety Report." March 14. <u>https://www.osac.gov/pages/ContentReportDetails.aspx?cid=19281</u>.

- Unmüßig, Barbara. 2015. Civil Society under Pressure Chrinking Closing No Space. *HeinRich Böll Stiftung*, December 17. <u>https://ps.boell.org/en/2015/12/17/civil-society-under-pressure-shrinking-closing-no-space</u>.
- UN Office of the High Commissioner for Human Rights and UNEP (UN Environment Programme). 2012. *Human Rights and the Environment Rio+20: Joint Report OHCHR and UNEP.* Rio de Janeiro, Brazil: UNEP.
- USEPA (United States Environmental Protection Agency). 2018. "Air Quality—National Summary." July 25. <u>https://www.epa.gov/air-trends/air-quality-national-summary</u>.
- Virunga National Park. 2012. "VirungaNP_058." https://virunga.org/virunganp_058/.
- Wekesa, S.M. 2013. "Right to Clean and Safe Water under the Kenyan Constitution 2010." *ESR Review—Economic and Social Rights in South Africa* 14 (1): 3-6.
- WIPO (World Intellectual Property Organization). 2017. "Matters Concerning the Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore." October 2 – 11. <u>http://www. wipo.int/export/sites/www/tk/en/igc/pdf/igc_mandate_2018-2019.pdf</u>.

Wolfe, Simon, Mark Worth, Suelette Dreyfus, and A.J. Brown. 2014. *Whistleblower Protection Laws in G20 Countries: Priorities for Action*. Blueprint for Free Speech. <u>https://piskamfauly.cz/wp-content/uploads/2015/08/FINAL-</u> Whistleblower-Protection-Laws-in-G20-Countries-Priorities-for-Action.pdf.

World Bank. 2009. "Matanza-Riachuelo Basin (MRB) Sustainable Development Adaptable Lending Program." <u>http://projects.worldbank.org/P105680/matanza-riachuelo-basin-mrb-sustainable-development-adaptable-lending-program?lang=en</u>.

Worth, Mark. 2013. Whistleblowing in Europe: Legal Protections for Whistleblowers in the EU. Transparency International.

———. 2015. Whistleblower Protection in Southeast Europe: An Overview of Laws, Practice, and Recent Initiatives. Regional Anti-corruption Initiative.

Zhang, Qing, and Benoit Mayer. 2017. "Public Interest Environmental Litigation under China's Environmental Protection Law." *Chinese Journal of Environmental Law*. The Chinese University of Hong Kong Faculty of Law Research Paper No. 2017-26. <u>http://dx.doi.org/10.2139/ssrn.3090820.</u>

Chapter 5 (Justice)

Access Facility. 2013. "Environmental Dispute Coordination Commission, Japan." last modified April 2013. <u>http://www.accessfacility.org/environmental-dispute-coordination-commission-japan</u>.

Alaska News. 2015. "Exxon Valdez timeline." Anchorage Daily News, October 15. <u>https://www.adn.com/energy/article/exxon-valdez-timeline/2015/10/16/</u>.

- Asian Development Bank. 2011. Asian Judges Symposium on Environmental Decision Making, the Rule of Law, and Environmental Justice: The Proceedings of the Symposium. <u>https://www.adb.org/sites/default/files/</u> publication/29631/symposium-environmental-decisions-law-justice.pdf.
- ———. 2016. Natural Capital and the Rule of Law: Proceedings of the ADB Second Asian Judges Symposium on Environment 2013. Manila: Asian Development Bank. <u>https://www.adb.org/sites/default/files/publication/186126/</u> natural-capital-and-rule-law.pdf.
- Bhopal. 2001. "Chronology." last modified January 2001. <u>https://web.archive.org/web/20010924010814/http://www.</u> <u>bhopal.com/chrono.htm</u>.
- Birdsong, Bret C. 2002. "Adjudicating Sustainability: New Zealand's Environment Court." *Ecology Law Quarterly* 29 (1): 1-69. <u>doi:10.15779/Z38WR8N</u>.
- Bonine, John E. 2008. *Best Practices Access to Justice: Agenda for Public Interest Law Reform*. <u>https://accessinitiative.org/resources/best-practices-access-justice</u>.
- Boyd, David. 2017. The Rights of Nature: A Legal Revolution that Could Save the World. Toronto: ECW Press.
- Braithwaite, John. 2002. Restorative Justice & Responsive Regulation. Oxford, UK: Oxford University Press.
- Brändlin, Anne-Sophie, and Gregg Benzow. 2013. "The Long Struggle for Compensation." *Deutsche Walle*, Oct. 16. <u>http://www.dw.com/en/the-long-struggle-for-compensation/a-17162648</u>.
- Bruch, Carl, Wole Coker, and Chris Van Arsdale. 2007. *Constitutional Environmental Law: Giving Force to Fundamental Principles in Africa.* 2nd ed. Washington, D.C.: Environmental Law Institute.
- Bruch, Carl, Carroll Muffett, and Sandra S. Nichols, eds. 2016. *Governance, Natural Resources, and Post-Conflict Peacebuilding*. London: Routledge.
- Burke, Kevin, and Steve Leben. 2007. "Procedural Fairness: A Key Ingredient to Public Satisfaction." White Paper of the American Judges Association. <u>http://www.amjudges.org/pdfs/AJAWhitePaper9-26-07.pdf</u>.
- Business and Human Rights Resource Centre. n.d. "Mineral Sands Resources Lawsuits (re Tormin mine, So. Africa)." Business & Human Right Resource Centre. <u>https://business-humanrights.org/en/mineral-sands-resources-lawsuits-re-tormin-mine-so-africa</u>.
- Cappelletti, Mauro. 1993. "Alternative Dispute Resolution Processes within the Framework of the World-Wide Access to Justice Movement." *Modern Law Review* 56 (3): 282-296.
- Constitute Project. 2018. "Explore Constitutions." https://www.constituteproject.org.
- Cramton, Roger C. 1971. "The Why, Where and How of Broadened Public Participation in the Administrative Process." *Georgetown Law Journal* 60:525.
- Dorn, Andrew D. 2010. "How Many Environmental Plaintiffs Are Still Standing?" Seventh Circuit Review 5 (2): 409-458.
- Environmental Democracy Index. 2015. "Environmental Democracy Index." <u>https://environmentaldemocracyindex.</u> <u>org</u>.
- European Commission. 2018. "European E-Justice Portal." <u>https://e-justice.europa.eu/home.</u> <u>do?action=home&plang=en</u>.
- Fearon, James and David Laitin. 2003. "Ethnicity, Insurgency, and Civil War." *American Political Science Review* 97 (1): 75-90.
- Finamore, Barbara. 2015. "How China's Top Court is Encouraging More Lawsuits Against Polluters." NRDC (blog), January 26. <u>https://www.nrdc.org/experts/barbara-finamore/how-chinas-top-court-encouraging-more-lawsuits-against-polluters</u>.
- Forever Sabah. 2016. "Environmental Courts and Tribunals." Working Paper No. 1. <u>http://foreversabah.org/wp-content/uploads/2016/06/Environmental-Courts-Tribunals-Legal-Innovation-Working-Paper-No.1-2016.pdf.</u>
- Fourie, Melissa. 2009. "How Civil and Administrative Penalties Can Change The Face of Environmental Compliance in South Africa." South African Journal of Environmental Law and Policy 16 (2): 93-127. <u>http://cer.org.za/wp-content/uploads/2011/11/Fourie-M-SAJELP-Paper-June-2009-Final.pdf</u>.
- Future Generations Commissioner for Wales. n.d. "Future Generations Commissioner for Wales." <u>https://</u> <u>futuregenerations.wales/about-us/future-generations-commissioner/</u>.

Annex I: References Cited

Government of Ontario. 2015. "Ontario Public Appointments Secretariat: Agency Details." Last modified June 19, 2015. <u>https://www.pas.gov.on.ca/scripts/en/BoardDetails.asp?boardID=755</u>.

——. 2017. "Turning Environmental Penalties into Environmental Benefits." *Ontario Newsroom*, April 4. <u>https://</u> news.ontario.ca/ene/en/2017/04/turning-environmental-penalties-into-environmental-benefits.html.

- Guidone, Ria. 2016. "Environmental Courts and Tribunals: An introduction to national experiences, lessons learned and good practice examples." Forever Sabah, Legal Innovation Working Paper No. 1.
- Hammons, Jeffrey T. 2016. "Public Interest Standing and Judicial Review of Environmental Matters: A Comparative Approach." *Columbia Journal of Environmental Law* 41(3): 515-551.
- Human Rights Watch. 2012. "Russia: Flawed Trial of Environmental Activists." June 21. <u>https://www.hrw.org/news/2012/06/21/russia-flawed-trial-environmental-activists</u>.
- International Commission of Jurists. 2010. Access to Justice: Human Rights Abuses Involving Corporations Philippines. Geneva, Switzerland.
- IFC (International Finance Corporation). 2010. *Alternative Dispute Resolution (ADR) Program in the Western Balkans: Giving Mediation a Chance - Telling Our ADR Story*. <u>http://www.ifc.org/wps/wcm/connect/</u> <u>bac5aa804817694ea1a7ef484bb223d8/PublicationBalkansGivingMediationaChanceADRStory</u>. <u>pdf?MOD=AJPERES</u>.
- IJIEA (International Judicial Institute for Environmental Adjudication). n.d. "Rules for Environmental Court Proceedings." <u>http://www.law.pace.edu/sites/default/files/IJIEA/Rules_for_Environmental_Court_Proceedings.</u> <u>pdf</u>.
- ILO (International Labour Organization). 2018. "NATLEX: Database of National Labour, Social Security and Related Human Rights Legislation." <u>http://www.ilo.org/dyn/natlex/natlex4.home?p_lang=en</u>.
- IUCN (International Union for the Conservation of Nature). 2016. "Judges Establish the Global Judicial Institute for the Environment." July 8. <u>https://www.iucn.org/news/world-commission-environmental-law/201607/judges-establish-global-judicial-institute-environment</u>.
- Jones, C.A., J. Pendergrass, J. Broderick, and J. Phelps. 2015. "Tropical Conservation and Liability for Environmental Harm." *Environmental Law Reporter* 45 (11): 11032-11050.
- Jones, C.A., and L. DiPinto. 2017. "The Role of Ecosystem Services in USA Natural Resource Liability Litigation." *Ecosystem Services* 29 (B): 333-51. <u>doi:10.1016/j.ecoser.2017.03.015</u>.
- Kameri-Mbote, Patricia. 2005. "Towards Greater Access to Justice in Environmental Disputes in Kenya: Opportunities for Intervention." IELRC Working Paper. Geneva, Switzerland: International Environmental Law Research Centre. http://www.ielrc.org/content/w0501.pdf.
- Land and Environment Court. 2015. "Access for People in Regional Areas." <u>http://www.lec.justice.nsw.gov.au/Pages/about/accessregional.aspx</u>.
- Lee-Anne Bruce. 2017. "Mining Company Threatens Environmental Activists." *CALS News*, November 2. <u>https://www.wits.ac.za/news/sources/cals-news/2017/mining-company-threatens-environmental-activists.html</u>.
- Lin, Yanmei and Jack Tuholske. 2015. "Field Notes from the Far East: China's New Public Interest Environmental Protection Law in Action." *Environmental Law Reporter* 45: 10855-62.
- Lorenzetti, Ricardo. 2018. "The Conflict over the Atuel River in Argentina." *Environmental Law Reporter* 48: 10220-10223.
- Love, Inessa. 2011. "Settling Out of Court: How Effective is Alternative Dispute Resolution?" *Viewpoint: Public Policy for the Private Sector*. Note No. 329. Washington, D.C.: The World Bank.
- Macintosh, Andrew, Heather Roberts, and Amy Constable. 2017. "An Empirical Evaluation of Environmental Citizen Suits under the Environment Protection and Biodiversity Conservation Act 1999 (Cth)." *Sydney Law Review* 39: 85-121.
- Macrory, Richard B. 2014. Regulation, Enforcement and Governance in Environmental Law, 2nd ed. Oxford, UK: Hart.
- Martin, Marisa. 2008. "Standing': Who Can Sue to Protect the Environment?" Social Education 72 (3): 113-117.
- May, James. 2003. "Now More than Ever: Trends in Environmental Citizen Suits at 30." *Widener Law Review* 10 (1): 1-48.

- McGregor, Lorna. 2015. "Alternative Dispute Resolution and Human Rights: Developing a Rights-Based Approach through the ECHR." *European Journal of International Law* 26 (3): 607-634.
- Mediators Beyond Borders. n.d. Case Studies Demonstrating the Use of Mediation, Consensus Building and Collaborative Problem Solving in Resolving Environmental and Climate-related Conflicts. <u>https://mediatorsbeyondborders.org/wp-content/uploads/2012/10/MBB-Climate-Change-Project-Case-Summaries.pdf?3284fd</u>.
- Meinzen-Dick, Ruth, and Rajendra Pradhan. 2016. "Property Rights and Legal Pluralism in Post-Conflict Environments: Problem or Opportunity for Natural Resource Management?" In *Governance, Natural Resources, and Post-Conflict Peacebuilding* edited by C. Bruch, C. Muffett, and S. S. Nichols, 525-544. London: Routledge. <u>https://environmentalpeacebuilding.org/assets/Documents/Volume-6-Chapter-26.pdf</u>.
- Menkel-Meadow, Carrie. 2002. "When Litigation Is Not the Only Way: Consensus Building and Mediation As Public Interest Lawyering." *Washington University Journal of Law and Policy* 10:37-62.
- Ministry for the Environment, New Zealand. 2017. "About the Environmental Assistance Fund." <u>http://www.mfe.govt.</u> <u>nz/more/funding/environmental-legal-assistance-fund/about-fund</u>.
- Ministry of Environment & Forestry. n.d. "National Environment Tribunal." http://www.environment.go.ke/?p=194.
- Miyazawa, Naori. 2013. "Customary Law and Community-Based Natural Resource Management in Post-Conflict Timor-Leste." In *Land and Post-Conflict Peacebuilding*, edited by J. Unruh and R. C. Williams, 511-532. London: Routledge. <u>https://environmentalpeacebuilding.org/assets/Documents/LibraryItem_000_Doc_167.pdf</u>.
- Murphy, Kristina. 2009. "Public Satisfaction with Police: The Importance of Procedural Justice and Police Performance in Police-Citizen Encounters." *Australian and New Zealand Journal of Criminology* 42 (2): 159-178. doi:10.1375/ acri.42.2.159.
- Nardi, Dominic. 2007. "Issues, Concerns, and Challenges in Environmental Adjudication in the Philippine Court System." *Virginia Review of Asian Studies* 28:17-36.
- Navratil, Szonja. 2013. "A Comparative Overview of Publicity in the Administration of Justice," in *Fair Trial and Judicial Independence: Hungarian Perspectives,* edited by Attila Badó, 177-196. London: Springer.
- Nemesio, Irene. 2014. "Strengthening Environmental Rule of Law: Enforcement, Combatting Corruption, and Encouraging Citizen Suits." *The Georgetown International Environmental Law Review* 27: 321-342. <u>https://gielr.files.wordpress.com/2015/04/nemesio-final-pdf-27-2.pdf</u>.
- National Oceanic and Atmospheric Administration. 2017. "Natural Resource Damage Assessment: Healing Our Coasts, Protecting Our Future Factsheet." Washington, D.C.
- Office of the Commissioner for Fundamental Rights (Hungary). n.d. "About the Office." <u>https://www.ajbh.hu/en/web/</u> <u>ajbh-en/about-the-office</u>.
- Office of the Ombudsman. 2017. "About Us: Mandate." http://www.ombudsman.gov.ph/about-us/mandate/.
- Okong'o, Samson. "Environmental Adjudication in Kenya: A reflection on the jurisdiction of the Environment and Land Court." Presentation at the Symposium on Environmental Adjudication in the 21st Century, Auckland, New Zealand, April 11, 2017. <u>https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwj4msKBvdTVAhUCWCYKHe8sDjsQFggqMAA&url=https%3A%2F%2Fwww.environmental-adjudication.org%2Fassets%2FUploads%2FGeneral%2FOkongo-PPT2.pdf&usg=AFQjCNEt01jz7O_MBhVOpriBKjzZzaYFug.</u>
- O'Leary, Rosemary and Susan Raines. 2001. "Lessons Learned from Two Decades of Alternative Dispute Resolution Programs and Processes at the U.S. Environmental Protection Agency." *Public Administration Review* 61 (6): 682-692. doi:10.1111/0033-3352.00139.
- Open Society Foundation for South Africa. 2017. In Good Company? Conversations around Transparency and Accountability in South Africa's Extractive Sector. Cape Town, South Africa.
- Pendergrass, John. 2012. "Role of Judiciary in Pollution Management." In *Getting to Green: A Sourcebook of Pollution* Management Policy Tools for Growth and Competitiveness. Washington, D.C.: The World Bank.
- Pearlman, M. L. 2000. "The Land and Environment Court of New South Wales: A Model for Environmental Protection." *Water, Air, and Soil Pollution* 123 (1-4): 395-407.
- Percival, Robert V., Christopher H. Schroeder, Alan S. Miller, and James P. Leape. 2018. *Environmental Regulation: Law, Science, and Policy*, 8th ed. Wolters Kluwer.

- Annex I: References Cited
- Preston, Brian. 2008. "Operating an Environmental Court: The Experience of the Land and Environmental Court of New South Wales." Inaugural Distinguished Lecture on Environmental Law, Trinidad and Tobago, Port of Spain, July 23.
- ———. 2011. "The Use of Restorative Justice for Environmental Crime." Criminal Law Journal 136 35 (3): 136-153.
- ———. 2014. "Characteristics of Successful Environmental Courts and Tribunals," *Journal of Environmental Law* 26 (3): 281-82. <u>https://doi.org/10.1093/jel/equ019</u>.
- Pring, George, and Catherine Pring. 2009. *Greening Justice: Creating and Improving Environmental Courts and Tribunals*. The Access Initiative. <u>https://www.eufje.org/images/DocDivers/Rapport%20Pring.pdf</u>.
- ———. 2016. Environmental Courts & Tribunals: A Guide for Policy Makers. Nairobi: United Nations Environment Programme. <u>http://wedocs.unep.org/bitstream/handle/20.500.11822/10001/environmental-courts-tribunals.</u> <u>pdf?sequence=1</u>.
- Riesel, Daniel. 2005. *Preliminary Injunctions, and Stays Pending Appeal in Environmental Litigation*. New York: Sive Paget & Riesel, P.C. <u>http://www.sprlaw.com/pdf/spr_preliminary_injunctions_072805.pdf</u>.
- Rottman, David B. 2007. "Adhere to Procedural Fairness in the Justice System." *Criminology & Public Policy* 6 (4): 835-842.
- Roy, Eleanor Ainge. 2016. "New Zealand River Granted Same Legal Rights as Human Being." *The Guardian*, March 16. <u>https://www.theguardian.com/world/2017/mar/16/new-zealand-river-granted-same-legal-rights-as-human-being</u>.
- Sait, Siraj. 2013. "Unexplored Dimensions: Islamic Land Systems in Afghanistan, Indonesia, Iraq, and Somalia." In *Land and Post-Conflict Peacebuilding*, edited by J. Unruh and R. C. Williams. London: Routledge.
- Saulino, Maria Florencia, and Luis José Torres Asencio, 2016. []The Protection of the Environment.[] In *The Latin American Casebook: Courts, Constitutions, and Rights*, edited by Juan F. Gonzalez-Bertomeu and Roberto Gargarella, 172-188. London: Routledge.
- Sentencing Council. 2014. *Environmental Offences Definitive Guideline*. <u>https://www.sentencingcouncil.org.uk/wp-content/uploads/Final_Environmental_Offences_Definitive_Guideline_web1.pdf</u>.
- Sferrazza, Lynn. 2003. "Financial and Other Barriers." In *Handbook on Access to Justice under the Aarhus Convention*, edited by Stephen Stec. Szentendre, Hungary: Regional Environmental Center for Central and Eastern Europe. http://www.unece.org/fileadmin/DAM/env/pp/a.to.j/AnalyticalStudies/handbook.final.pdf.
- Siegel, Joseph. 2007. "Alternative Dispute Resolution in Environmental Enforcement Cases: A Call for Enhanced Assessment and Greater Use." *Pace Environmental Law Review* 24 (1): 187-209. <u>http://digitalcommons.pace.edu/</u> <u>pelr/vol24/iss1/8</u>.
- South Australia Environment Protection Authority. 2015. *EPA Policy for Calculation of Civil Penalties under the Environment Protection Act 1993*. Adelaide, Australia. <u>https://www.google.com/url?sa=t&rct=j&q=&es-</u> <u>rc=s&source=web&cd=53&cad=rja&uact=8&ved=0ahUKEwi8kIDKqdnVAhXTySYKHUmdBZs4MhAWCDU-</u> <u>wAg&url=http%3A%2F%2Fwww.epa.sa.gov.au%2Ffiles%2F10908_calculations_2015.pdf&usg=AFQjCNGb1adw-</u> <u>zdlzCmlqkxYdcKJKXk2pnA</u>.
- South, Nigel, and Avi Brisman (eds.). 2013. *Routledge International Handbook of Green Criminology*. New York: Routledge.
- Straughan, Baird, and Tom Pollack. 2008. *The Broader Movement: Nonprofit Environmental and Conservation Organizations, 1989–2005.* Washington, D.C.: The Urban Institute. <u>https://www.urban.org/sites/default/files/publication/32186/411797-The-Broader-Movement-Nonprofit-Environmental-and-Conservation-Organizations---.PDF.</u>
- Strokke, Hugo. 2017. "Legal Limits to Tribal Governance: Coal Mining in Meghayala, India." CMI Brief 16 (2). Chr. Michelsen Institute. <u>https://brage.bibsys.no/xmlui/bitstream/handle/11250/2475332/Legal%20limits%20to%20</u> <u>tribal%20governance:%20coal%20mining%20in%20Meghalaya,%20India?sequence=1</u>.
- Supreme People's Court. 2017. "White Paper on China's Environmental and Resources Trial (2016-2017)." (in Chinese). July 3. <u>http://www.court.gov.cn/zixun-xiangqing-50682.html</u>.
- Trivedi, Anupam, and Kamal Jagati. 2016. "Uttarakhand HC Declares Ganga, Yamuna Living Entities, Gives Them Legal Rights." *Hindustan Times*, March 22. <u>http://www.hindustantimes.com/india-news/uttarakhand-hc-says-ganga-is-india-s-first-living-entity-grants-it-rights-equal-to-humans/story-Vol6DOG71fyMDihg5BuGCL.html</u>.

- Tyler, Tom R. 1984. "The Role of Perceived Injustice in Defendants' Evaluations of Their Courtroom Experiences." *Law* & *Society Review* 18 (1): 51-74.
- UNEP (UN Environment Programme). 2009. From Conflict to Peacebuilding: The Role of Natural Resources and the *Environment*. Geneva, Switzerland: UNEP.
- UNGA (UN General Assembly). 2011. Resolution 65/283, *Strengthening the role of mediation in the peaceful settlement of disputes, conflict prevention and resolution*, A/RES/65/283 (22 June 2011). <u>undocs.org/A/RES/65/283</u>.
- Union Carbide. 2017. "Union Carbide's Response Efforts to the Tragedy and the Settlement." <u>http://www.bhopal.</u> <u>com/UCC-Response-Efforts-to-Tragedy</u>.
- USEPA (U.S. Environmental Protection Agency). 2017a. "Criminal Provisions of the Clean Air Act." <u>https://www.epa.gov/enforcement/criminal-provisions-clean-air-act</u>.
 - -----. 2017b. "Criminal Provisions of the Clean Water Act." <u>https://www.epa.gov/enforcement/criminal-provisions-</u> <u>clean-water-act</u>.
- ———. 2017c. "Criminal Provisions of the Resource Conservation and Recovery Act (RCRA)." <u>https://www.epa.gov/</u> <u>enforcement/criminal-provisions-resource-conservation-and-recovery-act-rcra</u>.
- Van Ness, Daniel W. 2005. "An overview of restorative justice around the world." Paper presented at Workshop 2: Enhancing Criminal Justice Reform, Including Restorative Justice United Nations 11th Congress on Crime Prevention and Criminal Justice, Bangkok, Thailand, April 22, 2005. <u>https://assets.justice.vic.gov.au/njc/ resources/c4518c8a-c200-4623-afd1-42e255b62cf9/01+an+overview+of+restorative+justice.pdf</u>.
- Vargo, John F. 1993. "The American Rule on Attorney Fee Allocation: The Injured Person's Access to Justice." *American University Law Review* 42 (4): 1567-1636.
- Vella, Michael, and Lillian He. 2016. "China Begins Enforcing Newly Amended Environmental Protection Law." Jones Day Publication, January. <u>http://www.jonesday.com/china-begins-enforcing-newly-amended-environmental-protection-law-01-21-2016/.</u>
- Westerhuis, Diane. 2014. "Routledge International Handbook of Green Criminology." *Critical Criminology* 22 (1): 159-161. doi:10.1007/s10612-013-9188-1.
- WIPO (World Intellectual Property Organization). 2018. "WIPO Lex." http://www.wipo.int/wipolex/en/.
- World Bank Group. 2012. Getting to Green: A Sourcebook of Pollution Management Policy Tools for Growth and Competitiveness. Washington, D.C.: The International Bank for Reconstruction and Development. <u>http://</u> documents.worldbank.org/curated/en/560021468330349857/pdf/716080WP0Box370Getting0to0Green0web. pdf.
- World Health Organization (WHO). n.d. "Essential Medicines and Health Products Information Portal." Accessed Sept. 22, 2017. <u>http://apps.who.int/medicinedocs/en/d/Js2216e/7.9.html</u>.
- World Justice Project. 2014. WJP Rule of Law Index 2014 Report. Washington, D.C.: World Justice Project.
- Wright, Merideth. 2010. "The Vermont Environmental Court." *Journal of Court Innovation* 3 (Winter): 201-214. Available in pdf form at <u>https://www.nycourts.gov/court-innovation/Winter-2010/index.shtml</u>.
- Zehr, Howard. 2015. *The Little Book of Restorative Justice: Revised and Updated (Justice and Peacebuilding)*. New York, NY: Skyhorse Publishing, Inc.

Chapter 6 (Future Directions)

- Agarwal, Bina. 1994. A Field of One's Own: Gender and Land Rights in South Asia. Cambridge, UK: Cambridge University Press.
- Biggs, Eloise M., Eleanor Bruce, Bryan Boruff, John M.A. Duncan, Julia Horsley, Natasha Pauli, Kellie McNeill, Andreas Neef, Floris Van Ogtrop, Jayne Curnow, Billy Haworth, Stephanie Duce, and Yukihiro Imanari. 2015. "Sustainable Development and the Water–Energy–Food Nexus: A Perspective on Livelihoods." *Environmental Science & Policy* 54 (December): 389-97. <u>https://www.sciencedirect.com/science/article/pii/S1462901115300563.</u>
- Bizikova L., Dimple Roy, Darren Swanson, Henry D. Venema, and Matthew McCandless. 2013. *The Water-Energy-Food Security Nexus: Towards a Practical Planning and Decision-support Framework for Landscape Investment and Risk*

Annex I: References Cited

Management. Manitoba, Canada: International Institute for Sustainable Development. <u>http://www.cilt.uct.ac.za/sites/default/files/image_tool/images/91/Bizikova%20et%20al.%20wef_nexus_2013%20IISD.pdf</u>.

- Boserup, Ester, Su Fei Tan, and Camilla Toulmin. 2007. *Women's Role in Economic Development*. London: Routledge. <u>https://www.taylorfrancis.com/books/9781134036981</u>.
- Bruch, Carl. 2006. "Growing Up: International Environmental Law Enters Adolescence." *Environmental Forum* 23 (26): 28-33.
- Bruch, Carl, et al. 2008. "Post-Conflict Peace Building and Natural Resources." *Yearbook of International Environmental Law* 19 (1): 58-96, edited by Ole Kristian Fauchald, David Hunter, and Wang Xi. Oxford University Press.
- Cashore, Benjamin. 2002. "Legitimacy and the Privatization of Environmental Governance: How Non-State-Market-Driven (NSMD) Governancstems Gain Rule-making Authority." *Governance* 15 (4): 503-529. <u>https://onlinelibrary.</u> wiley.com/doi/abs/10.1111/1468-0491.00199.
- Castiglione C., D. Infante, and J. Smirnova. 2015. "Environment and Economic Growth: Is the Rule of Law the Gobetween? The Case of High-income Countries." *Journal of Energy, Sustainability and Society* 5 (26): 1-7. <u>https://link.springer.com/article/10.1186/s13705-015-0054-8</u>.
- Chapron, Guillaume. 2017. "The Environment Needs Cryptogovernance." *Nature* 545: 403-405. <u>https://www.nature.</u> <u>com/news/the-environment-needs-cryptogovernance-1.22023</u>.
- Cracknell, Arthur P. 2017. "UAVs: Regulations and Law Enforcement." *International Journal of Remote Sensing* 38 (8-10): 3054-67. <u>https://www.tandfonline.com/doi/abs/10.1080/01431161.2017.1302115</u>.
- Damania R., Per G. Fredriksson, and M. Mani. 2003. "The Persistence of Corruption and Regulatory Compliance Failures: Theory and Evidence." IMF Working Paper. International Monetary Fund, September. <u>https://www. researchgate.net/profile/Richard_Damania/publication/5154384_The_Persistence_of_Corruption_and_</u> Regulatory_Compliance_Failures_Theory_and_Evidence/links/0046352495bd7cdb22000000/The-Persistence-of-Corruption-and-Regulatory-Compliance-Failures-Theory-and-Evidence.pdf.
- Deere, Carmen Diana, and Magdalena León. 2001. *Empowering Women: Land and Property Rights in Latin America*. University of Pittsburgh Press.
- Düdder, Boris, and Omri Ross. 2017. "Timber Tracking: Reducing Complexity of Due Diligence by Using Blockchain Technology." <u>https://ssrn.com/abstract=3015219</u>.
- Duflo, Esther. 2012. "Women Empowerment and Economic Development." *Journal of Economic Literature* 50 (4): 1051-1079.
- Duflo, Esther, Michael Greenstone, and Rema Hanna. 2008. "Indoor Air Pollution, Health, and Economic Well-Being." Sapiens 1 (1): 7-16.
- Fukuda-Parr, Sakiko. 2016. "From the Millennium Development Goals to the Sustainable Development Goals: Shifts in Purpose, Concept, and Politics of Global Goal Setting for Development." *Gender & Development* 24 (1): 43-52. https://www.tandfonline.com/doi/abs/10.1080/13552074.2016.1145895.
- Fulton, Scott, and Antonio Herman Benjamin. 2011. "Foundations of Sustainability." *Environmental Forum* 28 (6): 32-36. <u>https://</u>
 - papers.ssrn.com/sol3/papers.cfm?abstract_id=1950777.
- Glicksman, Robert L., David L. Markell, and Claire Monteleoni. 2017. "Technological Innovation, Data Analytics, and Environmental

Enforcement" *Ecology Law Quarterly* 44 (1): 41-88. <u>https://scholarship.law.berkeley.edu/cgi/viewcontent.</u> cgi?article=2144&context=elq.

- The Global Commission on the Economy and Climate. 2014. "Innovation." In *Better Growth, Better Climate: The New Climate Economy Report*. Washington, D.C.: New Climate Economy. <u>https://newclimateeconomy.report/2014/wp-content/uploads/sites/2/2014/08/NCE_Chapter7_Innovation.pdf</u>.
- Government of the United Kingdom. 2018. "Government Launches New Plans to Stamp out the Illegal Wildlife Trade ahead of Landmark Conference." Press Release. July 2. <u>https://www.gov.uk/government/news/government-</u> launches-new-plans-to-stamp-out-the-illegal-wildlife-trade-ahead-of-landmark-uk-conference.
- Green Growth and the Law Working Group. 2018. "Environmental Rule of Law: An Analysis of Data Availability." Working Paper. Green Growth Knowledge Platform.

- Hauffler, Virginia. 2009. "The Kimberley Process Certification Scheme: An Innovation in Global Governance and Conflict Prevention." *Journal of Business Ethics* 89 (4): 403-16. <u>https://link.springer.com/article/10.1007/s10551-010-0401-9.</u>
- Khan, I., Frank Fariello, Laurence Boisson de Chazournes, and Kevin E. Davis. 2016. "Shifting the Paradigm: Rule of Law and the 2030 Agenda for Sustainable Development." *The World Bank Legal Review* 7: 221-38. <u>https://elibrary.worldbank.org/doi/abs/10.1596/978-1-4648-0545-5_ch11.</u>
- Le Billon, Philippe. 2005. Fuelling War: Natural Resources and Armed Conflicts. London: Routledge.
- Lehtonen, Matti. 2016. "Peacebuilding through Natural Resource Management: The UN Peacebuilding Commision's First Five Years." In *Governance, Natural Resources, and Post-Conflict Peacebuilding*, edited by Carl Bruch, Carroll Muffett, and Sandra S. Nichols, 147-164. London: Routledge. <u>https://environmentalpeacebuilding.org/assets/</u> Documents/Volume-6-Chapter-7.pdf.
- McNamara, Karen E. 2015. "Cross-border Migration with Dignity in Kiribati." *Forced Migration Review* 49 (May): 62. <u>https://search.proquest.com/openview/b41143408af3ff586b78c4885282b02c/1?pq-origsite=gscholar&cbl=55113.</u>
- Meinzen-Dick, Ruth S., Lynn R. Brown, Hilary Sims Feldstein, and Agnes R. Quisumbing. 1997. "Gender, Property Rights, and Natural Resources." *World Development* 25 (8): 1303-1315.
- OECD (Organisation for Economic Co-operation and Development). 2012. *Green Growth and Developing Countries: A Summary for Policy Makers*. <u>http://www.oecd.org/greengrowth/green-development/50526354.pdf</u>.
- Paddock, LeRoy C., and Jessica A. Wentz, eds. 2014. *Next Generation Environmental Compliance and Enforcement.* Washington, D.C.: Environmental Law Institute. <u>https://www.eli.org/sites/default/files/book_pdfs/next_generation_toc.pdf</u>.
- Prieur, Michel. 2018. *Les indicateurs juridiques: Outils d'évaluation de l'effectivité du droit de l'environnement*. Quebec City: Institut de la Francophonie pour le Développement Durable.
- Quisumbing, Agnes R., and Lauren Pandolfelli. 2010. "Promising Approaches to Address the Needs of Poor Female Farmers: Resources, Constraints, and Interventions." *World Development* 38 (4): 581-592.
- Radics, Olivia, and Carl Bruch. 2017. "The Law of Pillage, Conflict Resources, and Jus Post Bellum." In *Environmental Protection and Transitions from Conflict to Peace: Clarifying Norms, Principles and Practices*, edited by Carsten Stahn, Jens Iverson, and Jennifer Easterday. Oxford University Press.
- Ravier, Sophie, Anne-Cecile Vialle, Russ Doran, and John Stokes. 2016. "Environmental Experiences and Developments in United Nations Peacekeeping Operations." In *Governance, Natural Resources, and Post-Conflict Peacebuilding*, edited by Carl Bruch, Carroll Muffett, and Sandra S. Nichols, 195-206. London: Routledge. <u>https://</u> <u>environmentalpeacebuilding.org/assets/Documents/Volume-6-Chapter-10.pdf.</u>
- Ringler, Claudia, Anik Bhaduri, and Richard Lawford. 2013. "The Nexus across Water, Energy, Land and Food (WELF): Potential for Improved Resource Use Efficiency?" *Current Opinion in Environmental Sustainability* 5 (6): 617-624. <u>https://www.sciencedirect.com/science/article/pii/S1877343513001504.</u>
- Sachs, Jeffrey D. 2012. "From Millennium Development Goals to Sustainable Development Goals." *Lancet 379 (2): 206-211.* <u>https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(12)60685-0/.</u>
- Skrylnikov, Dmytro, and Iryna Tustanovska. 1998. "Ukraine." In Doors To Democracy: Current Trends and Practices In Public Participation in Environmental Decisionmaking in the Newly Independent States. Szentendre, Hungary: Regional Environmental Center.
- Stafford-Smith, Mark, David Griggs, Owen Gaffney, Farooq Ullah, Belinda Reyers, Norichika Kanie, Bjorn Stigson, Paul Shrivastava, Melissa Leach, and Deborah O'Connell. 2017. "Integration: The Key to Implementing the Sustainable Development Goals." *Sustainability Science* 12 (6): 911-919.
- Teel, Julie. 2001. "International Environmental Impact Assessment: A Case Study in Implementation." *Environmental Law Reporter* 31: 10291-10312.
- UNDPA (UN Department of Political Affairs) and UNEP (UN Environment Programme). 2015. *Natural Resources* and Conflict: A Guide for Mediation Practitioners. <u>https://postconflict.unep.ch/publications/UNDPA_UNEP_NRC_</u> <u>Mediation_full.pdf.</u>
- UNDPO (UN Department of Peacekeeping Operations). 2010. Second Generation Disarmament, Demobilization and Reintegration (DDR) Practices in Peace Operations: A Contribution to the New Horizon Discussion on Challenges and

Annex I: References Cited

Opportunities for UN Peacekeeping. New York: United Nations Department of Peacekeeping Operations. <u>https://peacekeeping.un.org/sites/</u>

default/files/2gddr_eng_with_cover.pdf.

UNEP (UN Environment Programme). 2006. *Manual on Compliance with and Enforcement of Multilateral Environmental Agreements*. Nairobi, Kenya. <u>http://www.acpmeas.info/publications/Manual_on_Compliance_with_and_Enforcement_of_MEAs.pdf</u>.

-----. 2012. Greening the Blue Helmets. <u>Nairobi, Kenya. http://www.un.org/en/peacekeeping/publications/UNEP_greening_blue_</u>

<u>helmets.pdf.</u>

-----. 2015. "Environmental Rule of Law: Critical to Sustainable Development." Issue Brief. Nairobi, Kenya. <u>http://</u> wedocs.unep.org/bitstream/handle/20.500.11822/10664/issue-brief-erol.pdf.

UNEP (UN Environment Programme) and INTERPOL. 2016. *The Rise of Environmental Crime*. Response Assessment. <u>https://wedocs.unep.org/bitstream/handle/20.500.11822/7662/-The_rise_of_environmental_crime_A_growing_threat_to_natural_</u>

resources_peace,_development_and_security-2016environmental_crimes.pdf.pdf?sequence=3&isAllowed=y.

- UNEP (UN Environment Programme), UN Women, UN Peacebuilding Support Office, and UN Development Programme. 2013. *Women and Natural Resources: Unlocking the Peace Building Potential*. Nairobi, Kenya.
- UNGA (UN General Assembly). 2000. *United Nations Millennium Declaration*, Resolution 55/2, UN Doc. A/RES/55/2 (18 September 2000). <u>http://www.un.org/millennium/declaration/ares552e.pdf</u>.
- -----. 2012. Resolution 67/1. Declaration of the High-level Meeting of the General Assembly on the Rule of Law at the National and International Levels. A/RES/55/2 (30 November 2012). <u>http://www.un.org/millennium/declaration/ares552e.pdf</u>.
- -----. 2015. Resolution 70/1. *Transforming Our World: The 2030 Agenda for Sustainable Development*. A/RES/70/1 (21 October 2015). <u>http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E.</u>
- Vandenbergh, Michael P. 2013. "Private Environmental Governance." *Cornell Law Review* 99: 129-200. <u>https://heinonline.org/HOL/LandingPage?handle=hein.journals/clqv99&div=7&id=&page</u>.
- Waleij, Annica. 2016. "Crime, Credibility, and Effective Peacekeeping: Lessons from the Field." In *Governance, Natural Resources, and Post-Conflict Peacebuilding,* edited by Carl Bruch, Carroll Muffett, and Sandra S. Nichols, 207-221. London: Routledge. <u>https://environmentalpeacebuilding.org/assets/Documents/Volume-6-Chapter-11.pdf</u>.
- Zbrodoff, S. 2012. "Pilot Projects—Making Innovations and New Concepts Fly." Paper presented at PMI Global Congress 2012, North America, Vancouver, British Columbia, Canada. Newtown Square, PA: Project Management Institute.

Annex II: International Instruments

Annex II: International Instruments

This annex lists key international instruments relevant to various aspects of environmental rule of law, organized by chapter. These instruments include both binding and important non-binding instruments at the global and regional levels. The lists are illustrative, with many additional conventions, agreements, protocols, declarations, and other instruments often relevant to a particular topic.

Chapter 2 (Institutions)

- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (1989)
- Biological Weapons Convention (1972)
- Cartagena Protocol on the Biosafety to the Convention on Biological Diversity (2003)
- Chemical Weapons Convention (1993)
- Convention on Biological Diversity (1992)
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (1973)
- Convention on Long-Range Transboundary Air Pollution (1979)
- Convention on the Conservation of Migratory Species of Wild Animals (1979)
- Convention on the Prevention of Marine Pollution by the Dumping of Wastes and Other Matter (1972, "London Convention")
- Montreal Protocol on Substances that Deplete the Ozone Layer (1987)
- Paris Agreement (2015)
- Rio Declaration on Environment and Development (1992)
- United Nations Convention to Combat Desertification (1994)
- United Nations Convention on the Law of the Sea (1982)
- United Nations Economic Commission for Europe Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (1998, "Aarhus Convention")
- United Nations Framework Convention on Climate Change (1992)

Chapter 3 (Civic Engagement)

- Convention for the Protection of the World Cultural and Natural Heritage (1972)
- Convention on Biological Diversity (1992)
- Convention on Persistent Organic Pollutants (2001)
- United Nations Convention to Combat Desertification (1994)
- United Nations Economic Commission for Europe Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (1998, "Aarhus Convention")
- United Nations Framework Convention on Climate Change (1992)

Chapter 4 (Rights)

- Agenda 21 (1993)
- Charter of the United Nations (1945)
- Convention of Biological Diversity (1992)
- Convention on the Elimination of All Forms of Discrimination against Women (1979)
- Convention on the Elimination of All Forms of Racial Discrimination (1969)
- Convention on the Rights of the Child (1989)
- International Covenant on Civil and Political Rights (1966)
- International Covenant on Economic, Social and Cultural Rights (1966)
- International Labor Organization Convention Concerning Indigenous and Tribal Peoples in Independent Countries (1989; ILO No. 169)
- Rio Declaration on Environment and Development (1992)
- Declaration of the United Nations Conference on the Human Environment (1972, "Stockholm Declaration")
- UN Declaration on Protecting Human Rights Defenders Addressing Economic, Social and Cultural Rights (2016)
- UN Declaration on the Rights of Indigenous Peoples (2007)

Annex II: International Instruments

- United Nations Economic Commission for Europe Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (1998, "Aarhus Convention")
- UN Guiding Principles on Business and Human Rights (2011)
- Universal Declaration of Human Rights (1948)

Chapter 5 (Justice)

- Bali Guidelines for the Development of National Legislation on Access to Information, Public Participation and Access to Justice in Environmental Matters (2010)
- International Covenant on Civil and Political Rights (1966)
- International Labor Organization Convention Concerning Indigenous and Tribal Peoples in Independent Countries (1989; ILO No. 169)
- Rio Declaration on Environment and Development (1992)
- The Universal Declaration of Human Rights (1948)
- United Nations Economic Commission for Europe Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (1998, "Aarhus Convention")
- UN Guiding Principles on Business and Human Rights (2011)

Annex III: Indices and Data Sources

Index	Relevant Entity	Available Data Types	Notes About Data
Corruption Per- ception Index	Transparency	Perceived levels of public sector cor-	180 Countries and territories
	International [<u>link</u>]	ruption	Perception-based
			Annual
Democracy Index	Economic Intelligence Unit	Measures pluralism, civil liberties and political cultures; categorizes countries by regime type	167 countries
			Latest data from 2017
Enforcing Con-	World Bank [<u>link</u>]	Efficiency and quality of commercial dispute resolution; time and cost for resolving disputes through the court	Global data
tracts			Latest data from 2017
Environmental	World Resources Institute [<u>link]</u>	State of laws protecting three pillars of environmental decision-making: transparency, public participation, and	70 Countries
Democracy Index			National level
mack		justice	Legal indicators scored qual-
		75 legal indicators (from UNEP Bali Guidelines)	itatively on three point scale, but with criteria designed to reduce subjectivity
		 Extent of provisions Strength of provisions (corresponding enforceable legal right) 	Practice indicators scored qualitatively on three point scale
		24 supplemental indicators assessing implementation/practice (do not affect legal indicator score)	Latest data from 2017
Environmental Policy Strin-	OECD (Organisation for Economic Cooperation and Development) [<u>link</u>]	Taxes, Trading Schemes, FITs, Standards, Research & Development Subsidies Economy-wide policy stringency (diesel proxy) E	Based on primary and sec- ondary data
gency			"Most OECD countries"
			Time period: 1990s-2012
			Does not evaluate enforce-
			ment
Environmental	Yale University [<u>link</u>]	 Indicators divided by objective or category: Environmental Health (Air Quality, Water & Sanitation, Heavy Metals), Ecosystem Vitality (Biodiversity & Habitat), Forests, Fisheries, Climate & Energy (Emissions), Air & Water Resources, Agriculture (Pollutant Management) 	Latest data from 2018
Performance Index			180 countries
			Outcome-oriented

Index	Relevant Entity	Available Data Types	Notes About Data
Environmental Rule of Law Index (Pilot)	World Justice Project	 Measures nine factors of environmental rule of law: Overarching laws & procedures (access to information, public participation, administrative enforcement & procedures, judicial enforcement & procedures) Compliance by environmental sector (air quality & climate, extraction & mining, waste management, water, biodiversity & forestry) 	Data is perception-based Multi-year effort addressing a limited number of coun- tries (the project is in pilot stage)
Governance Indicators	World Bank [<u>link</u>]	 Indicators address six dimensions of governance: Voice and Accountability Political Stability and Absence of Violence Government Effectiveness Regulatory Quality Rule of Law Control of Corruption 	Global data Data from 1996-2016
Freedom in the World Index	Freedom House [<u>link</u>]	 Political Rights – 3 sub-categories: Electoral Process, Political Pluralism and Participation, Functioning of Government Civil Liberties – 4 sub-categories: Freedom of Expression and Belief, Associational and Organizational rights, Rule of Law, Personal Autonomy and Individual Rights 	195 countries + 14 territories Latest data from 2017
Freedom of Speech	Pew Research Center [link]	 Questions that comprise the index include the following topics: Free Speech (Government Criticism, Offense to Minorities, Call for Violent Protests, Offense to Religious Groups, Sexually Explicit) Free Press (Publishing Information about Protests, Sensitive National Security Issues, Economic Issues) 	Latest data from 2015 38 Countries Based on survey data

Annex III: Indices and Data Sources

Index	Relevant Entity	Available Data Types	Notes About Data
Freedom of the Press	Freedom House [link]	 Press freedom evaluated through 23 questions divided into three categories: Legal environment (laws and regulations and extent to use in practice) Political environment (degree of political influence on content of media) Economic environment (structure/transparency/concen-tration of media ownership, costs, advertising and subsidy withholding, corruption and bribery, etc.) 	199 countries and territories Data from 1980 to 2017
Governance Indicators	World Bank [<u>link</u>]	 Indicators address six dimensions of governance: Voice and Accountability Political Stability and Absence of Violence Government Effectiveness Regulatory Quality Rule of Law Control of Corruption 	Global data Data from 1996-2016
Human Free- dom Index	Cato Institute, Fraser Institute, and Friedrich Naumann Foundation for Freedom <u>[link]</u>	 Global measurement of personal, civil, and economic freedom 79 indicators in the following topics: Rule of Law, Security and Safety, Movement, Religion, Association/Assembly/ Civil Society, Expression and Information, Identity and Relationships, Size of Government, Legal System and Property Rights, Access to Sound Money, Freedom to Trade internationally, Regulation of Credit/Labor/Business 	Latest data from 2015 159 Countries National level Some indicators drawn from other sources (such as WJP's Rule of Law Index, the World Bank's Governance Indica- tors, the UN Office on Drugs and Crime International Homicide Database, and the Uppsala Conflict Data Program)
Justice Index	National Center for Access to Justice (Fordham Law School) [<u>link]</u>	 Four subject matter indexes: Number of Attorneys for People in Poverty Support for People without Lawyers Support for People with Limited English Proficiency Support for People with Disabilities 	Latest data from 2016 Only addresses United States of America at the sub-national (state) level, but the methodology is notable and the data measured is relevant to evaluating "Ac- cess to Justice"

Index	Relevant Entity	Available Data Types	Notes About Data
Resource Gov- ernance Index	NRGI (Natural Resources Governance Institute) [link]	 Value Realization Licensing, Taxation, Local Impact, State-owned Enterprises Revenue Management National Budgeting, Subnational Resource Revenue Sharing, Sovereign Wealth Funds Enabling Environment Open Data, Political Stability and Absence of Violence, Control of Corruption, Rule of Law, Regulatory Quality, Government Effectiveness, Voice and Accountability 	Based on primary and sec- ondary data 81 Countries National level Latest data from 2017
Rule of Law Index	World Justice Project [link]	 Eight factors and 44 sub-factors plus informal justice on the following topics: Constraints on Government Powers Absence of Corruption Open Government Fundamental Rights Order and Security Regulatory Enforcement Civil Justice Informal Justice 	113 countries Household and expert sur- veys (primarily primary data) Latest data from 2017-18 Highly relevant, but not envi- ronment-focused
Social Insti- tutions and Gender Index	OECD (Organisation for Economic Cooperation and Development) [link]	 Evaluates 5 key variables: Discrimination in Family Code Restriction of Physical Integrity Son Bias Restrictions to Resources and Assets Restrictions to Civil Liberties 	160 countries Latest data from 2014

"There's no doubt that we are now facing a serious global crisis in sustaining the only planet on which we can survive. This first Global Report on Environmental Rule of Law comprehensively captures the prevailing lack of accountability, strong environmental governance and respect for human rights for the sustainability of our environment."

Joan Carling

indigenous rights activist and environmental defender from the Philippines, Champions of the Earth winner 2018

"The UN Environment's Report provides a comprehensive look at the components of Environmental Rule of Law, at the progress we have made, and the threats we have encountered. Its message is clear. Environmental Rule of Law is essential for keeping our planet habitable and for ensuring environmental justice for all. We need laws that are implemented, enforced, and effective, and we need to monitor and assess the results and the impact."

Professor Edith Brown Weiss

Georgetown University

"What motivates us the most is doing whatever we can to ensure a world with less pollution and more rights for more people in the Americas. To achieve this, access to justice for all and enforcement of the rule of law to build peaceful and inclusive societies are paramount."

Luis Almagro

Secretary General, Organization of American States (OAS)



United Nations Environment Programme