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ARTICLE

A Rights Turn in Biodiversity Litigation?

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Abstract

Based on an original database of 49 rights-based biodiversity (RBB) lawsuits filed around the world, this article hypothesizes that rights-based norms and institutions are becoming increasingly important in legal challenges aimed at biodiversity protection. We explain retrospectively the antecedents and characterize early RBB litigation by constructing a typology of cases and legal arguments that litigants and courts have used to establish the connection between biodiversity and rights protection. We then, prospectively, draw on our RBB case database and the trajectory of human rights and climate change (HRCC) litigation to anticipate likely trends, opportunities, and obstacles for future RBB cases. We posit that future RBB cases will build on the foundations laid by pioneering RBB cases, will apply lessons from HRCC litigation, and will systematically frame biodiversity loss as a rights issue.

Keywords: Biodiversity, Human rights, Rights turn, Litigation

1. INTRODUCTION

Earth is home to a rich variety of life, within species, across species, and across ecosystems. This diversity of life – also known as biodiversity – plays a central role in ensuring that the Earth remains a hospitable home for humans. The conditions that allow humans to survive on this planet – the availability of fresh water and oxygen, soil to grow food, and even parts of the atmosphere that prevent dangerous sun exposure – do not exist independently of other life on Earth. They are made *by* life on Earth. ¹

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We are deeply grateful to Jacqueline Gallant (NYU Earth Rights Advocacy) for her skilful and generous support throughout the research and editorial process.

Competing interests: The authors declare none.

See S. Díaz et al., 'Summary for Policymakers', in Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) (E.S. Brondizio et al. (eds)), Global Assessment Report on

Yet, this crucial diversity is facing a level of risk not seen since dinosaurs were dramatically wiped from the face of the planet. Anthropogenic drivers² – from land-use change to the over-exploitation of nature to the introduction of invasive species – are reducing biodiversity at a rate that humans have never before witnessed.³ When life collectively starts unravelling – when we start losing the species and populations that comprise it – these very enabling conditions that allow plants, animals, fungi, microorganisms, and indeed people everywhere to survive and thrive begin to crumble.

Moreover, this is not the only ecological emergency currently at play. In the 21st century, the world is facing a series of planetary crises, which include not only biodiversity collapse but also climate breakdown, water scarcity, desertification, and pervasive pollution, in addition to a surge in emerging infectious diseases of zoonotic origin. While responses to date have resulted in modest progress in some areas, the overall trends continue to worsen.⁴

With regard to climate change and biodiversity loss, in particular, there are striking similarities. Both crises have been caused predominantly by wealthy countries but have their most pernicious impacts on poor countries.⁵ Both crises are described in exhaustive detail by authoritative bodies of leading scientists from across the world: the Intergovernmental Panel on Climate Change (IPCC)⁶ and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES).⁷ Both are the subject of international treaties established at the Earth Summit in Rio de Janeiro (Brazil) in 1992, the United Nations Framework Convention on Climate Change (UNFCCC),⁸ and the Convention on Biological Diversity (CBD).⁹ States have consistently failed to fulfil commitments under both of these international environmental regimes, from emissions reduction pledges made pursuant to the Kyoto Protocol and the Paris Agreement¹⁰ to the Aichi Biodiversity Targets (and its

Biodiversity and Ecosystem Services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES Secretariat, 2019), pp. 1–56, at 22–3, available at: https://www.ipbes.net/global-assessment.

For more on the anthropogenic drivers of biodiversity loss, see, e.g., Díaz et al., ibid., pp. 28–33.

³ Ibid., pp. 24–7.

Ibid., pp. 24–32; H.-O. Pörtner et al., 'Summary for Policymakers', in Intergovernmental Panel on Climate Change (IPCC) (H.-O. Pörtner et al. (eds)), Climate Change 2022: Impacts, Adaptation and Vulnerability, Contribution of Working Group II to the Sixth Assessment Report of the IPCC (IPCC, 2022), pp. 3–33, at 9–15.

For more on the disproportionate impact of climate change on the poor see, e.g., UN General Assembly (UNGA), Human Rights Council (HRC), 'Climate Change and Poverty: Report of the Special Rapporteur on Extreme Poverty and Human Rights', 17 July 2019, UN Doc. A/HRC/41/39, available at: https://undocs.org/A/HRC/41/39. For more information on the disproportionate impact of biodiversity loss on the poor see, e.g., Díaz et al., n. 1 above, pp. 15–6.

⁶ More on the IPCC is available at: https://www.ipcc.ch.

More on the IPBES is available at: https://www.ipbes.net.

New York, NY (US), 9 May 1992, in force 21 Mar. 1994, available at: https://unfccc.int.

⁹ Rio de Janeiro (Brazil), 5 June 1992, in force 29 Dec. 1993, available at: https://www.cbd.int.

For more on how states have failed to meet their commitments under the UNFCCC regime see, e.g., A. Olhoff et al., *The Closing Window: Climate Crisis Calls for Rapid Transformation of Societies – Emissions Gap Report 2022* (United Nations Environment Programme (UNEP), 2022), pp. xvi–xxvii, available at: https://www.unep.org/resources/emissions-gap-report-2022. Kyoto Protocol to the UNFCCC, Kyoto (Japan), 11 Dec. 1997, in force 16 Feb. 2005, available at: http://unfccc.int/resource/

predecessors).¹¹ Yet, neither the UNFCCC nor the CBD (nor any of their daughter agreements) include any effective enforcement mechanisms for non-compliance, thus creating an accountability gap.¹² Corporate actors – from fossil fuel companies to industrial agriculture firms to plastic and pesticide producers – are major contributors to both crises; yet, they are not explicitly incorporated into the regulatory structures established by either international environmental regime, which widens the accountability gap.¹³

Litigation is one attempt to close the accountability gap between commitments and actions. In the context of climate change, there have been over 2,000 cases brought in countries across the world.¹⁴ The majority of these cases have involved judicial review of government decisions and statutory interpretation, with an increasing number of cases targeting corporations for their contributions to climate change.¹⁵

However, in recent years there has been a notable uptick in climate change litigation based on human rights arguments. In particular, since 2015 the spread of human rights and climate change (HRCC) litigation has accelerated dramatically. Increasingly, advocates, lawyers, and courts have come to see litigation as a mechanism for exerting bottom-up pressure on states to effectively align their policies and decisions with the goals of the Paris Agreement and the urgent recommendations of the IPCC in order to avert the most dire scenarios of global warming.

docs/convkp/kpeng.pdf; Paris Agreement, Paris (France), 12 Dec. 2015, in force 4 Nov. 2016, available at: http://unfccc.int/paris_agreement/items/9485.php.

For more on how states have failed to meet their commitments under the CBD see, e.g., 'Summary for Policymakers', in *Global Biodiversity Outlook 5* (Secretariat of the CBD, 2020), pp. 1–16, at 2–11, available at: https://www.cbd.int/gbo/gbo5/publication/gbo-5-spm-en.pdf. For Aichi Biodiversity Targets see UNEP, CBD, Decision 10/2 'The Strategic Plan for Biodiversity 2011–2020 and the Aichi Biodiversity Targets', 29 Oct. 2010, UN Doc. UNEP/CBD/COP/DEC/X/2.

See, e.g., T. Kuramochi et al., 'Nationally Determined Contributions and Long-Term Pledges: The Global Landscape and G20 Member Progress', in Olhoff et al., n. 10 above, pp. 11–7; M. den Elzen, J. Portugal-Pereira & J. Rogelj, 'The Emissions Gap', in UNEP, The Heat Is On: A World of Climate Promises Not Yet Delivered – Emissions Gap Report 2021 (UNEP, 2021), pp. 29–37, available at: https://www.unep.org/resources/emissions-gap-report-2021; 'Summary for Policymakers', n. 11 above.

¹³ UNFCCC, n. 8 above; Paris Agreement, n. 10 above; CBD, n. 9 above.

The comprehensive climate change litigation database of the Columbia University Sabin Center for Climate Change Law currently reports more than 1,520 cases in the US and more than 650 cases from other nations: 'About', Climate Change Litigation Databases, available at: http://climatecasechart.com/climate-change-litigation/about.

See, e.g., M. Burger & D.J. Metzger, Global Climate Litigation Report: 2020 Status Review (UNEP, 2020), available at: https://wedocs.unep.org/bitstream/handle/20.500.11822/34818/GCLR.pdf? sequence=1&isAllowed=y; J. Setzer & C. Higham, Global Trends in Climate Litigation: 2023 Snapshot (London School of Economics et al., 2023), available at: https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2023/06/Global_trends_in_climate_change_litigation_2023_snapshot.pdf.

See, e.g., C. Rodríguez-Garavito, 'Litigating the Climate Emergency: The Global Rise of Human Rights-Based Litigation for Climate Action', in C. Rodríguez-Garavito (ed.), Litigating the Climate Emergency: How Human Rights, Courts, and Legal Mobilization Can Bolster Climate Action (Cambridge University Press, 2022), pp. 9–83, at 15–27.

¹⁷ Paris Agreement, n. 10 above.

M. Burger & M.A. Tigre, Global Climate Litigation Report: 2023 Status Review (UNEP, 2023), pp. 26–41, available at: https://wedocs.unep.org/bitstream/handle/20.500.11822/43008/global_climate_litigation_report_2023.pdf?sequence=3.

In 2017, Jacqueline Peel and Hari Osofsky analyzed a handful of pioneering HRCC cases and hypothesized that they signalled a 'rights turn' in climate change litigation. ¹⁹ The increase in the number, diversity, and impact of HRCC lawsuits and rulings has since proven them right. In this article we identify early signs of a similar rights turn in biodiversity litigation. Based on an original database of 49 rights-based biodiversity (RBB) lawsuits filed in domestic and international judicial and quasi-judicial bodies around the world, we hypothesize that rights-based norms and institutions are becoming increasingly important in legal challenges that aim to protect diversity among species, within species, and across ecosystems.

For the purposes of this article we define RBB litigation as any biodiversity lawsuit that employs rights language or claims in the petition or court rulings. We understand biodiversity litigation to refer more broadly to 'any legal dispute at the national, regional or international level that concerns conservation of, sustainable use of' and access to and benefit-sharing of 'genetic resources, species, ecosystems and their relations'. ²⁰

Our analysis suggests that RBB litigation finds itself in a position similar to that of rights-based climate litigation in the early 2010s. At that point, a few scattered cases (notably the 2005 petition of the Inuit people against the United States (US) before the Inter-American Commission on Human Rights (IACHR))²¹ had framed climate impacts as human rights violations but no case had yet systematically and successfully articulated the relevant legal doctrines on issues such as standing, causality, and remedies. This changed with the ground-breaking contribution of the *Urgenda* case, which does not yet have an equivalent in RBB litigation. However, the cases in our RBB database have laid some of the conceptual and legal foundations for the rights turn. With the Kunming-Montreal Global Biodiversity Framework arising new opportunities for legal mobilization, including through its inclusion of rights language and quantitative benchmarks for biodiversity action, we hypothesize that future RBB cases will draw on those foundations, apply lessons from HRCC litigation, and systematically frame biodiversity loss as a rights issue.²⁴

J. Peel & H.M. Osofsky, 'A Rights Turn in Climate Change Litigation?' (2018) 7(1) Transnational Environmental Law, pp. 37–67.

G. Futhazar, S. Maljean-Dubois & J. Razzaque, 'Introduction: Setting the Scene', in G. Futhazar, S. Maljean-Dubois & J. Razzaque (eds), *Biodiversity Litigation* (Oxford University Press, 2022), pp. 1–32, at 15.

See Petition to the Inter-American Commission on Human Rights Seeking Relief from Violations Resulting from Global Warming Caused by Acts and Omissions of the United States, 2005, Sabin Center for Climate Change Law, Climate Change Litigation Databases, available at: http://climatecasechart.com/non-us-case/petition-to-the-inter-american-commission-on-human-rights-seeking-relief-from-violations-resulting-from-global-warming-caused-by-acts-and-omissions-of-the-united-states.

For the Dutch Supreme Court's decision in the Urgenda case see The State of the Netherlands (Ministry of Infrastructure and the Environment) v. Stichting Urgenda, Hoge Raad [Supreme Court], 20 Dec. 2019, ECLI:NL:HR:2019:2007.

²³ UNEP, Conference of the Parties to the CBD, 'Kunming-Montreal Global Biodiversity Framework', Montreal (Canada), 19 Dec. 2022, UN Doc. CBD/COP/15/L.25, available at: https://www.cbd.int/doc/decisions/cop-15/cop-15-dec-04-en.pdf.

See, e.g., P. Greenfield, "Paris Agreement" for Nature Imperative at COP15, Architects of Climate Deal Say', The Guardian, 16 Nov. 2022, available at: https://www.theguardian.com/environment/2022/nov/16/paris-agreement-architects-urge-leaders-to-reach-deal-at-cop15-biodiversity-talks-aoe; A. Willige, 'How the UN's Global Biodiversity Framework Could Become the "Paris Agreement for Nature";

Our goal in this article is twofold. From a retrospective viewpoint we explain the antecedents and characterize early RBB litigation by constructing a typology of cases and legal arguments that litigants and courts have used to establish the connection between biodiversity and rights protection. From a prospective viewpoint we draw on our RBB database and the trajectory of rights-based climate litigation to anticipate likely trends, opportunities, and obstacles for future RBB cases.

Our argument stands on four legs. Firstly, we posit that most RBB lawsuits have proceeded along two tracks which are familiar to HRCC litigation. On the one hand, litigants and judges have often framed the protection of biodiversity as a component of the right to a healthy environment. On the other hand, several cases have framed the protection of species and ecosystems in terms of the protection of civil, political, and socio-economic rights, from the right to life to the right to health.

Secondly, we argue that an important novelty of RBB litigation, distinct from HRCC litigation, is that several of the key arguments and many crucial lawsuits and rulings have been framed in terms of the violation of Indigenous peoples' rights and the rights of nature. In fact, given that RBB cases tend to advance a holistic view of rights, they blur conventional legal lines, including the frontier between types of human rights (individual *versus* collective) and between the rights of humans and the rights of non-humans; hence, our decision to talk broadly of rights-based biodiversity litigation, as opposed to *human* rights-based litigation.

Thirdly, we posit that, although there are initial signs of a rights turn in biodiversity litigation, this process is in its early stages. There are only a handful of cases that explicitly articulate a conceptual and causal link between threats to species or ecosystems, on the one hand, and rights violations, on the other. In most cases the connection between biodiversity loss and rights violations is rather indirect as both tend to be discussed as by-products of the government or corporate action under challenge – be it the use of pesticides, industrial food production, the construction of a large infrastructure project, and so on. Also, our analysis of the available submissions and rulings shows few signs of cross-fertilization among cases and jurisdictions.

Fourthly, we argue that the construction of the missing building blocks in RBB litigation is likely to be facilitated by the adoption of the Kunming-Montreal Global Biodiversity Framework.²⁵ In much the same way that debates around the Paris Agreement provided the momentum, scientific foundation, and networking opportunities among litigants that prompted the proliferation of HRCC litigation after 2015,²⁶ we anticipate that a wave of sophisticated and cross-fertilized RBB lawsuits will find their way to domestic and international courts in the remainder of the 2020s.

The article proceeds as follows. The next section (2) briefly discusses three developments that set the stage for RBB litigation: (i) the efforts to protect biodiversity through non-rights-based litigation; (ii) the rights turn in climate litigation; and (iii) the growing

World Economic Forum, 11 Oct. 2021, available at: https://www.weforum.org/agenda/2021/10/global-biodiversity-framework-cop15-sustainable-food-systems.

²⁵ Kunming-Montreal Global Biodiversity Framework, n. 23 above.

²⁶ See, e.g., Rodríguez-Garavito (ed.), n. 16 above.

recognition of biodiversity's impact on human rights in international law and governance. In Section 3, we describe the contours and types of the RBB cases filed in jurisdictions around the world. To conclude (Section 4), we identify emerging norms, as well as the potential and challenges of RBB litigation.

2. SETTING THE STAGE FOR RBB LITIGATION

2.1. Non-Rights-Based Biodiversity Litigation

There is a wealth of biodiversity litigation not based on human rights arguments that serves as a key source of legal doctrines, strategies, and tactics for RBB lawsuits. The global extent of litigation related to biodiversity is currently unknown. There is no database comparable with Columbia University's comprehensive climate change litigation database, let alone a systematic database on RBB litigation like the one curated by New York University's (NYU) Climate Law Accelerator on climate change and human rights cases. However, the Columbia University database includes more than 150 American cases that directly link climate change and biodiversity loss. These cases involve the use of the US Endangered Species Act (ESA)²⁹ and other wildlife laws that address climate change. In 2011, for example, an American appellate court ruled that the US Fish and Wildlife Service (FWS) failed to justify its decision to delist grizzly bears in the Yellowstone region (removing legal protection pursuant to the ESA) because the FWS failed to consider the impact of climate change on a key source of the bear's food supply. The Columbia University climate litigation database also includes 16 non-US cases involving biodiversity and ecosystems.

As is the case with climate change, there is an extensive history of litigation attempting to use existing legislative frameworks to achieve improved protection for biodiversity. A landmark case in the US involved the potential impacts of a dam that could have destroyed the last remaining habitat of a small fish called the snail darter.³² A lawsuit was filed asserting violations of newly enacted provisions of the ESA and, to the surprise of many, in 1978 the US Supreme Court ruled in favour of the fish, stating that 'the plain intent of Congress in enacting [the ESA] was to halt and reverse the trend toward species extinction, whatever the cost'.³³ As the Court acknowledged:

We reiterate that, for the purposes of this article, we understand biodiversity litigation to refer broadly to 'any legal dispute at the national, regional or international level that concerns conservation of, sustainable use of and access to and benefit-sharing of 'genetic resources, species, ecosystems and their relations'; see Futhazar, Maljean-Dubois & Razzaque, n. 20 above, p. 15.

See U.S. Climate Change Litigation: Endangered Species Act and Other Wildlife Protection Statutes, Sabin Center for Climate Change Law, Climate Change Litigation Databases, available at: http://climatecasechart.com.

²⁹ 16 U.S.C. 1531–1544, 28 Dec. 1978.

³⁰ Greater Yellowstone Coalition, Inc. v. Servheen, 665 F.3d 1015 (9th Cir. 2011).

Non-U.S. Climate Change Litigation: Protecting Biodiversity and Ecosystems, Sabin Center for Climate Change Law, Climate Change Litigation Databases, available at: http://climatecasechart.com/non-us-case-category/protecting-biodiveristy-and-ecosystems.

³² Tennessee Valley Authority v. Hill, 437 U.S. 153 (1978).

³³ Ibid., p. 436.

[the Court's decision and its interpretation of the law] will produce results requiring the sacrifice of the anticipated benefits of the project and of many millions of dollars in public funds. But examination of the language, history, and structure of the legislation under review here indicates beyond doubt that Congress intended endangered species to be afforded the highest of priorities.³⁴

Since 1978, there have been hundreds of cases in the US based on the ESA. There is a similar, although more recent pattern of litigation in Canada based on the Species at Risk Act,³⁵ as well as in Europe, where litigants have relied on the European Union's (EU) nature conservation directives.³⁶

Civil society organizations, including Earthjustice and the Center for Biological Diversity, routinely file lawsuits asserting that the US government has violated the ESA through its actions or omissions. These lawsuits are frequently successful and have contributed to major improvements in the protection of endangered species and their critical habitat.³⁷ In Canada, Ecojustice has a similarly successful track record of protecting endangered species and their habitats through public interest litigation.³⁸

International courts and tribunals also play key roles in protecting ecosystems and biodiversity, as illustrated by the 2014–15 Serengeti highway rulings by the East African Court of Justice;³⁹ the essential role of the Court of Justice of the European Union (CJEU) in enforcing the EU nature conservation directives;⁴⁰ and several cases decided by the International Court of Justice (ICJ).⁴¹ In a 2011 case, the CJEU recognized the importance of ecological connectivity.⁴² The case concerned an open-cast coal mining project in the Spanish Natura 2000 site Alto Sil, causing a loss of habitat for the brown bear in a corridor area. The mining operations were also found capable of producing a barrier that would fragment the habitat of the capercaillie, a type of grouse.⁴³

In short, this existing body of non-RBB litigation provides a foundation on which RBB litigation can build.

³⁴ Ibid., p. 436.

³⁵ S.C. 2002, c. 29, 12. Dec. 2002.

E.g., Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora [1992] OJ L 206/7. See also, e.g., A. Trouwborst et al., 'International Wildlife Law: Understanding and Enhancing Its Role in Conservation' (2017) 67(9) BioScience, pp. 784–90.

³⁷ See K. Suckling, N. Greenwald & T. Curry, 'On Time, On Target: How the Endangered Species Act is Saving America's Wildlife', Center for Biological Diversity, May 2012, available at: https://biologicaldiversity.org/campaigns/esa/pdfs/110_REPORT.pdf.

See, e.g., Canada (Fisheries and Oceans) v. David Suzuki Foundation, 2012 FCA 40 (CanLII); Western Canada Wilderness Committee v. Canada (Fisheries and Oceans), 2014 FC 148 (CanLII).

^{39 &#}x27;Court Decides that Construction of the Road across Serengeti National Park is Unlawful and also Grants Application for Withdraw of the Matter on the Removal of the EALA Speaker', East African Court of Justice (2014), available at: https://www.eacj.org/?p=2221.

⁴⁰ See generally C.H. Born & H. Schoukens, 'Biodiversity Litigation before the Court of Justice of the European Union', in Futhazar, Maljean-Dubois & Razzaque, n. 20 above, pp. 293–329.

See Trouwborst et al., n. 36 above, p. 787.

⁴² Case C-404/09, European Commission v. Spain, Judgment, 24 Nov. 2011, ECLI:EU:C:2011:768.

⁴³ Ibid., paras 91–111.

2.2. The Rights Turn in Climate Litigation

Since the mid-2010s, lawsuits targeting governments – and, to a lesser extent, corporations – for their roles in the ongoing climate emergency have made headlines around the world. Key precedents like the Dutch *Urgenda* case, ⁴⁴ the German *Neubauer* case, ⁴⁵ and the Brazilian *Climate Fund* case ⁴⁶ are now well known for the legal innovations they introduced and mainstreamed. ⁴⁷

Indeed, since the early 2010s and accelerating rapidly throughout the decade, cases employing rights language or arguments to target climate harm – HRCC litigation – have been filed in national and international judicial and quasi-judicial bodies around the world. These cases have advanced concepts, doctrines, and strategies to secure urgent and ambitious climate action through the courts, albeit with mixed results.

The story of rights-based climate litigation is not, however, a linear one. According to the database compiled by the Climate Law Accelerator at NYU School of Law, before 2015 only 23 rights-based climate cases had been filed anywhere in the world. Between 2015 and June 2023, 256 climate cases implicating human rights were brought in 44 national jurisdictions and before 14 international judicial or quasi-judicial bodies, with Europe leading as the most active region. The bulk of HRCC cases filed since 2015 target governments (about 84%) and focus on the mitigation of greenhouse gases (GHG) (about 92%).

Geographically, HRCC litigation is increasingly a tool deployed in the global south as well as the global north. Lawsuits targeting governments for inadequate GHG mitigation policies have been filed, with mixed results, in Belgium, Canada, France, Germany, India, Ireland, Nepal, Pakistan, South Korea, Spain, Switzerland, and the United Kingdom, among other countries, ⁴⁹ as well as with regional tribunals (such

⁴⁴ Urgenda v. The Netherlands, n. 22 above.

^{45 &#}x27;Constitutional Complaints against the Federal Climate Change Act Partially Successful', Bundesverfassungsgericht, Press Release No 31/2021, 29 Apr. 2021, available at: https://www.bundesverfassungsgericht.de/SharedDocs/Pressemitteilungen/EN/2021/bvg21-031.html.

PSB et al. v. Brazil (on Climate Fund), Sabin Center for Climate Change Law, Climate Change Litigation Databases, available at: http://climatecasechart.com/non-us-case/psb-et-al-v-federal-union.

See, e.g., Rodríguez-Garavito (ed.), n. 16 above; B. Mayer, 'The State of the Netherlands v. Urgenda Foundation: Ruling of the Court of Appeal of The Hague (9 October 2018)' (2019) 8(1) Transnational Environmental Law, pp. 167–92; J. van Zeben, 'Establishing a Governmental Duty of Care for Climate Change Mitigation: Will Urgenda Turn the Tide?' (2015) 4(2) Transnational Environmental Law, pp. 339–57. M. Wewerinke-Singh & A. McCoach, 'The State of the Netherlands v Urgenda Foundation: Distilling Best Practice and Lessons Learnt for Future Rights-Based Climate Litigation' (2021) 30(2) Review of European, Comparative & International Environmental Law, pp. 275–83; L. Maxwell, S. Mead & D. van Berkel, 'Standards for Adjudicating the Next Generation of Urgenda-Style Cases' (2022) 13(1) Journal of Human Rights and the Environment, pp. 35–63.

⁴⁸ See 'CLX Rights-Based Climate Cases Database', CLX Toolkit, available at: https://docs.google.com/spreadsheets/d/1-S9xu0IU0yV9NBgWjoGYnPQKi5RBMEcWVBGqqvBKWTk/edit#gid=0.

⁴⁹ VZW/ASBL Klimaatzaak v. Belgium, Judgment, No. 2015/4585/A, 17 June 2021 (Court of First Instance of Brussels); ENVironnement JEUnesse v. Attorney General of Canada, No. 500-06-000955-183, 11 July 2019 (Superior Court of Quebec); Armando Ferrão Carvalho v. European Parliament, Judgment (Sixth Chamber), No. C-565/19P, 25 Mar. 2021 (European Court of Justice); Notre Affaire à Tous v. France, Judgment, No. 1904967 et al., 3 Feb. 2021 (Paris Administrative Court); Neubauer v. Germany, Case No. BvR 2656/18/1, BvR 78/20/1, BvR 96/20/1, BvR 288/20, 24 Mar. 2021 (Bundesverfassungsgericht [BVerfG] [Federal Constitutional Court]); Pandey v. India, Order, No. 187/2017, 15 Jan. 2019 (National Green Tribunal, India); Friends of the

as the East African Court of Justice) and international bodies (e.g., the UN Committee on the Rights of the Child).⁵⁰

For the purposes of this article, the study of the origins and evolution of HRCC cases offers five lessons for RBB litigation. Firstly, litigants and courts have drawn on the tactics and norms of previous waves of rights-based litigation. Prior jurisprudence on the right to life and the right to health has been particularly useful in European cases, while concepts and monitoring mechanisms from socio-economic rights (such as the concept of states' positive duties and the ability of courts to maintain supervisory jurisdiction to monitor compliance with their rulings) have been invoked frequently by litigants and courts in the global south. ⁵¹ A similar process can be seen at play in emerging RBB litigation, where lawyers and judges are drawing on the corpus of civil, political, and socio-economic rights law as well as on more recent developments regarding the rights of Indigenous peoples, the right to a healthy environment, the rights of nature, and HRCC law itself.

Secondly, the Paris Agreement was a key catalyst for HRCC litigation. ⁵² The inclusion of rights language in the Preamble – as well as the opportunity that the lead-up to Paris and its aftermath offered for the consolidation of a network of organizations and practitioners that would later launch some of the key lawsuits – were fundamental for the rights turn. A similar process may take place in RBB litigation, given the extensive use of rights language in the Kunming-Montreal Global Biodiversity Framework, including references to the right to a clean, healthy and sustainable environment; the rights of Indigenous peoples and local communities; the rights of women and girls; and implementation following a rights-based approach. ⁵³ The new Framework, at the minimum, provides civil society actors with clear rights language connected to biodiversity as well as qualitative and quantitative benchmarks against which to assess government action, which could be deployed in RBB litigation in a manner similar to the way in which such language and benchmarks have been used in HRCC litigation. Target 3 of the Framework, for example, provides that state parties:

Irish Environment v. Ireland [2019] IEHC 747, 748 (High Court, Ireland); Shrestha v. Prime Minister, Judgment, No. 074-WO-0283, 25 Dec. 2018 (Supreme Court, Nepal); Maria Khan et al. v. Pakistan, Order, Writ Petition No. 8960/2019, 15 Feb. 2019 (Lahore High Court, Pakistan); Do-Hyun et al. v. South Korea, Sabin Center for Climate Change Law, Climate Change Litigation Databases, available at: http://climatecasechart.com/non-us-case/kim-yujin-et-al-v-south-korea; Greenpeace v. Spain, Judgment, 31 Mar. 2022, Supreme Court (Spain), ECLI:ES:TS:2022:5712A; Verein KlimaSeniorinnen Schweiz v. DETEC, Judgment, 1C_37/2019, 5 May 2020 (Federal Supreme Court, Switzerland); Plan B Earth v. Secretary of State for Business, Energy and Industrial Strategy [2018] EWHC 1892 CO/16/2018 (UK).

Centre for Food and Adequate Living Rights v. Attorney General of Uganda, Petition, App. No. 29/2020 (East African Court of Justice); UN Committee on the Rights of the Child, 'Decision Adopted by the Committee on the Rights of the Child under the Optional Protocol to the Convention on the Rights of the Child on a Communications Procedure concerning Communication No. 107/2019', 22 Sept. 2021, UN Doc. CRC/C/88/D/107/2019, available at: https://documents-dds-ny.un.org/doc/UNDOC/GEN/G21/322/67/PDF/G2132267.pdf?OpenElement.

⁵¹ See C. Rodríguez-Garavito, 'Human Rights: The Global South's Route to Climate Litigation' (2020) 114 American Journal of International Law Unbound, pp. 40–4.

See, e.g., Rodríguez-Garavito, n. 16 above, pp. 15–25; L. Wegener, 'Can the Paris Agreement Help Climate Change Litigation and Vice Versa?' (2020) 9(1) Transnational Environmental Law, pp. 17–36.

⁵³ Kunming-Montreal Global Biodiversity Framework, n. 23 above, Annex paras 8 and 14, Targets 22 and 23.

[e]nsure and enable that by 2030 at least 30 per cent of terrestrial, inland water, and of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures, recognizing indigenous and traditional territories, where applicable, and integrated into wider landscapes, seascapes and the ocean, while ensuring that any sustainable use, where appropriate in such areas, is fully consistent with conservation outcomes, recognizing and respecting the rights of indigenous peoples and local communities, including over their traditional territories. ⁵⁴

For this target, the Framework provides a clear quantitative benchmark of protecting 30% of all lands and waters by 2030, while incorporating a requirement to respect human rights.

Thirdly, HRCC litigants have expanded and updated the human rights normative frame in order to address the unique features of climate change. They have successfully argued for the relaxation of conventional doctrines of standing and harm in order to acknowledge the complex causal links between global warming and rights impacts around the world, ⁵⁵ a broad interpretation of extraterritorial obligations, ⁵⁶ and the need to align domestic policies with the international legal and scientific consensus on climate change. ⁵⁷ Indeed, several of the court findings in rulings like *Neubauer* and *Urgenda* would have been (and were) considered long shots just a few years ago, even by many in the human rights field. ⁵⁸ Similarly, RBB litigation is beginning to introduce innovations in the human rights toolkit – for instance, through holistic visions of rights that match the evidence of interconnectedness of ecosystems and species, both human and non-human.

Fourthly, HRCC litigants and courts have advanced arguments and doctrines that are sensitive to the importance of time in addressing the climate emergency, as well as to the unique temporal dimensions of global warming. Given the need to halve GHG emissions by 2030 to avert the most catastrophic scenarios of climate change, and the fact that the non-linearity of global warming makes future action much more costly than action today, HRCC lawsuits and rulings have stressed the legal duty of governments to act with urgency. Many of them have also recognized the rights of young people and future generations as victims of climate inaction. As César

⁵⁴ Ibid., Target 3.

E.g., standing typically requires that the plaintiff(s) demonstrate(s) individualized harm, which in the early days of HRCC litigation proved to be a significant stumbling block in that climate change has impacts on the whole of society, though certain populations are affected to a greater or lesser degree. Over time, however, courts and litigants developed arguments around standing whereby the individualized harm required did not necessitate the absence of general impacts, thus allowing cases to proceed to the merits; see, e.g., M. Burger & J. Gundlach, The Status of Climate Change Litigation: A Global Review (UNEP, 2017), pp. 28–9.

In Sacchi v. Argentina, e.g., the UN Committee on the Rights of the Child found that because states have effective control over the GHG emissions emitted within their territories, they can be held accountable for the climate impacts experienced by children outside the states' territorial boundaries; see UN Committee on the Rights of the Child, n. 50 above.

⁵⁷ Rodríguez-Garavito, n. 16 above, pp. 9–39.

⁵⁸ See, e.g., E.A. Posner, 'Climate Change and International Human Rights Litigation: A Critical Appraisal' (2007) 155 University of Pennsylvania Law Review, pp. 1925–45.

Rodríguez-Garavito has argued, these and other 'timeful' doctrines have made sensitivity to time a core feature of the HRCC field. Similarly, the scale and speed of biodiversity loss constitute a global emergency that requires immediate action in order to avert irreversible consequences, from species extinction to habitat loss. These impacts, in turn, would have direct and profound consequences on the enjoyment of human rights – including the rights to life and food, threatened by drastic drops in agricultural yields, and the right to health, threatened by the proliferation of zoonotic diseases. Therefore, as in the climate realm, scientists and governments have acknowledged the need to 'bend the biodiversity curve' by setting urgent goals and targets that litigants and courts can leverage in their claims and rulings.

Fifthly, scientists have played a key role in HRCC litigation. Given the complexity, rapid evolution, and direct relevance of climate science in addressing some of the most vexing legal questions in climate litigation, litigants have marshalled data and scientific expertise to make their case for more ambitious and urgent climate action. Some of the questions that scientists have been asked to address are:

- Who is responsible for climate-induced rights violations?
- Who qualifies as a victim of global warming?
- What is the 'fair share' of emissions reduction for which a given country or corporation is accountable?
- What are the appropriate remedies?

Advances in climate attribution science, emissions calculations, and other fields – as well as the increasingly urgent messages from the scientific community as represented by the IPCC – have provided courts with the evidence they need to develop new doctrines on issues of standing, rights of future generations, governments' fair share, extraterritorial responsibilities, and other crucial legal topics. Biodiversity scientists are likely to play a similarly important role in future RBB lawsuits, given the complex scientific questions raised by the adjudication of the rights implications of biodiversity loss. In particular, the comprehensive and urgent IPBES assessments, including its recommendations, will be used by litigants and courts to document how biodiversity loss affects human rights. 62

⁵⁹ C. Rodríguez-Garavito, 'Climatizing Human Rights: Economic and Social Rights for the Anthropocene', in M. Langford & K. Young, *The Oxford Handbook of Economic and Social Rights* (Oxford University Press, 2023), pp. C68P1–C68N87.

⁶⁰ Díaz et al., n. 1 above, pp. 14–9; see also E.O. Wilson, Half-Earth: Our Planet's Fight for Life (Liveright, 2016).

See G. Liston, 'Enhancing the Efficacy of Climate Change Litigation: How to Resolve the "Fair Share Question" in the Context of International Human Rights Law' (2020) 9(2) Cambridge International Law Journal, pp. 241–63; see also M. Burger, J. Wentz & D.J. Metzger, 'Climate Science and Human Rights: Using Attribution Science to Frame Government Mitigation and Adaptation Obligations', in Rodríguez-Garavito, n. 16 above, pp. 223–38.

⁶² Díaz et al., n. 1 above; U. Pascual et al., 'Summary for Policymakers', in IPBES, The Methodological Assessment Report on the Diverse Values and Valuation of Nature (IPBES, 2022), pp. 1–45.

2.3. Biodiversity's Impact on Human Rights

The rights turn in biodiversity litigation also draws on developments in international law and governance, where there is growing recognition of the linkages between human rights and the health of the biosphere.⁶³ In a vital development, the UN Human Rights Council in 2021 recognized, for the first time at the global level, the right to a clean, healthy, and sustainable environment.⁶⁴ The resolution acknowledged:

[T]he impact of climate change, the unsustainable management and use of natural resources, the pollution of air, land and water, the unsound management of chemicals and waste, the resulting loss of biodiversity and the decline in services provided by ecosystems interfere with the enjoyment of a clean, healthy and sustainable environment, and that environmental damage has negative implications, both direct and indirect, for the effective enjoyment of all human rights.⁶⁵

The resolution encouraged states to 'adopt policies for the enjoyment of the right to a clean, healthy and sustainable environment as appropriate, including with respect to biodiversity and ecosystems'. ⁶⁶ The UN General Assembly adopted a similar resolution in 2022, confirming that the right to a clean, healthy, and sustainable environment is now a universally recognized human right. ⁶⁷ The General Assembly resolution identified biodiversity loss as one of 'the most pressing and serious threats to the ability of present and future generations to effectively enjoy all human rights'. ⁶⁸

Other human rights directly affected by declining biodiversity include the rights to life, health, and food; the rights of the child; and the rights of Indigenous peoples, as acknowledged by UN treaty bodies and special procedures.⁶⁹ The first Special

⁶³ See E. Morgera, 'Biodiversity as a Human Right and Its Implications for the EU's External Action', European Parliament Directorate General for External Policies, Apr. 2020, available at: https://www.europarl.europa.eu/RegData/etudes/STUD/2020/603491/EXPO_STU(2020)603491_EN. pdf.

⁶⁴ See UNHRC, Resolution 48/13, 'The Human Right to a Clean, Healthy and Sustainable Environment', 8 Oct. 2021, UN Doc. A/HRC/RES/48/13, available at: https://undocs.org/A/HRC/RES/48/13.

⁶⁵ Ibid., p. 2.

⁶⁶ Ibid., para. 4(c).

⁶⁷ See UNGA Resolution 76/300, 'The Human Right to a Clean, Healthy and Sustainable Environment', 28 July 2022, UN Doc. A/RES/76/300 (2022), available at: https://digitallibrary.un.org/record/ 3983329?ln=en.

⁶⁸ Ibid., pp. 1–2.

⁶⁹ See, e.g., UNHRC, 'Indigenous Peoples and Coronavirus Disease (COVID-19) Recovery: Report of the Special Rapporteur on the Rights of Indigenous Peoples', 6 Aug. 2021, UN Doc. 48/54, available at: https://undocs.org/A/HRC/48/54; UNHRC, 'Report of the Special Rapporteur in the Field of Cultural Rights on Her Visit to Botswana', 12 Jan. 2016, UN Doc. A/HRC/31/59/Add.1, available at: https://undocs.org/A/HRC/31/59/Add.1; UNHRC, 'Report submitted by the Special Rapporteur on the Right to Food', 20 Dec. 2010, UN Doc. A/HRC/16/49, available at: https://undocs.org/A/HRC/16/49; UNHRC, 'Report of the Working Group on the Universal Periodic Review: Argentina', 22 Dec. 2017, UN Doc. A/HRC/37/5, available at: https://undocs.org/A/HRC/36/11, available at: https://undocs.org/A/HRC/36/11; UN Committee on the Rights of the Child, 'Concluding Observations on the Combined Fourth and Fifth Periodic Reports of the Russian Federation', 25 Feb. 2014, UN Doc. CRC/C/RUS/CO/4-5, available at: https://undocs.org/CRC/C/RUS/CO/4-5; Committee on the Elimination of Racial Discrimination, 'Concluding Observations on the Combined Thirteenth to Fifteenth UN Periodic Reports of Suriname', 25 Sept. 2015, UN Doc. CERD/C/SUR/CO/13-15, available at: https://undocs.org/CERD/C/SUR/CO/13-15.

Rapporteur on human rights and the environment, John Knox, dedicated a report to the issue of biodiversity and human rights, concluding that 'the degradation and loss of biodiversity undermine the ability of human beings to enjoy their human rights'. The second Special Rapporteur on human rights and the environment, David R. Boyd, presented a report to the UN General Assembly, which identified healthy ecosystems and biodiversity as one of the six substantive elements of the right to a healthy environment, based on constitutions, legislation, and jurisprudence from across the world. Boyd also published a special report identifying the obligation of states to pursue rights-based approaches to the conservation, restoration, and sustainable use of biodiversity.

In landmark pronouncements, the Inter-American Court of Human Rights recognized a justiciable right to a healthy environment and included biological diversity as one of the components of a healthy environment. In a 2017 advisory opinion, the Court made reference to the ratification of the CBD by 34 state members of the Organization of American States as evidence of the regional legal consensus around the precautionary principle and other institutional mechanisms that support the right to a healthy environment. In 2020, the Court, in its ruling in the *Lakha Honhat Association v. Argentina* case, protected the rights of an Indigenous community by invoking, among other sources, Article 8 CBD, which establishes the state's duty to respect and preserve Indigenous knowledge and practices that contribute to the conservation and sustainable use of biodiversity.

Relatedly, the IPBES observed that:

[a]reas of the world projected to experience significant negative effects from global changes in climate, biodiversity, ecosystem functions and nature's contributions to people are also home to large concentrations of Indigenous peoples and many of the world's poorest communities. Because of their strong dependency on nature and its contributions for subsistence, livelihoods and health, those communities will be disproportionately hard hit by those negative changes.⁷⁶

VINHRC, 'Report of the Special Rapporteur on the Issue of Human Rights Obligations relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment', 19 Jan. 2017, UN Doc. A/HRC/34/49, available at: https://undocs.org/A/HRC/34/49.

See UNHRC, 'Human Rights Depend on a Healthy Biosphere', 15 July 2020, UN Doc. A/75/161, available at: https://undocs.org/A/75/161.

See D.R. Boyd & S. Keene, 'Human Rights-based Approaches to Conserving Biodiversity: Equitable, Effective and Imperative', Policy Brief No. 1 from the Special Rapporteur on Human Rights and the Environment, Aug. 2021, available at: https://www.ohchr.org/Documents/Issues/Environment/SREnvironment/policy-briefing-1.pdf.

⁷³ See *The Environment & Human Rights*, Advisory Opinion OC-23/17, Inter-American Court of Human Rights (IACtHR) (Ser. A), No. 23, para. 176, available at: https://www.corteidh.or.cr/docs/opiniones/seriea_23_ing.pdf.

⁷⁴ Ibid., para. 176.

See Case of the Indigenous Communities of the Lhaka Honhat (Our Land) Association v. Argentina (Merits, Reparations and Costs), 6 Feb. 2020, IACtHR (Ser. C), No. 400, para. 248 (Lhaka Honhat (Our Land) Association).

⁷⁶ IPBES, 'Report of the Plenary of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services on the Work of its Seventh Session', 29 Apr.–4 May 2019, IPBES/7/10/Add.1 (2019), available at: https://www.ipbes.net/events/ipbes-7-plenary.

Exacerbating the injustice is the fact that Indigenous peoples and local communities who are materially, culturally, and spiritually dependent on their traditional lands bear an unfair share of the costs imposed by activities that damage nature, but they rarely enjoy a fair share of the economic benefits.

These international legal sources, together with authoritative scientific assessments by IPBES, have elucidated the multifarious impacts of biodiversity loss on the enjoyment of human rights. As has been the case in HRCC litigation, authoritative statements of this kind are finding their way into RBB litigation and are likely to be actively invoked in future lawsuits.

3. EMERGING RIGHTS-BASED BIODIVERSITY LITIGATION: A PRELIMINARY GLOBAL SCAN

As noted above, there is no comprehensive database on biodiversity litigation, let alone RBB litigation. In order to contribute to filling this gap, we searched for potential RBB cases through a combination of methods, including interviews with key researchers and practitioners, analysis of secondary sources, and online searches. In classifying a case as RBB litigation, we followed standard practice in HRCC litigation research, which considers a lawsuit to belong to the HRCC universe only if litigants or courts explicitly reference climate change and human rights in their submissions or decisions.⁷⁷ Therefore, our database of RBB litigation includes only cases in which the terms 'biodiversity' (or 'biological diversity') *and* 'right(s)' are referenced in the respective submissions or rulings.

Based on those criteria and methods, we created an original database that identifies and characterizes 49 RBB cases from 20 jurisdictions around the world. The table in the Appendix contains identifying information and key details of each case. We analyzed the available materials, including the court's ruling (which often provides a summary of the original submission) and, when available online, the original submission itself.

It is important to note that this is not a comprehensive list of RBB cases. Given the absence of systematic compilations on the matter, the potentially large number of relevant cases, and the fragmentation of primary sources and information, our database can capture only a subset of RBB litigation. Thus, we use the cases in our database to sketch, rather than definitively represent, the contours of this emerging field of legal practice. Our hope is that, just as has happened in the realm of HRCC litigation, our initial efforts will inspire other researchers to collectively document other cases, painting a fuller picture of RBB litigation.

3.1. Typology of RBB Cases

We categorize RBB litigation according to a typology that distinguishes four kinds of case, depending on the type of right invoked by the plaintiffs or the courts: (1) cases

See J. Peel & H.M. Osofsky, Climate Change Litigation (Cambridge University Press, 2015), pp. 4–8.

based on the right to a healthy environment; (2) cases revolving around other universal human rights; (3) cases involving the rights of Indigenous peoples; and (4) cases centred on the rights of nature.

This typology provides an analytical lens through which to understand the major organizing features of this emerging field of legal practice.

(1) Cases based on the right to a healthy environment

As several scholars have argued, the recognition of the right to a healthy environment provides a powerful instrument for action against environmental crises, including biodiversity loss. ⁷⁸ In the context of RBB litigation, an increasing number of courts – particularly in Latin America as well as elsewhere – have clarified that the right to a healthy environment protects not only human beings harmed by the deterioration of their natural surroundings but also the components and the diversity of the environment. In 2017, for instance, the Inter-American Court of Human Rights issued an important advisory opinion in which it concluded that:

the right to a healthy environment, unlike other rights, protects the components of the environment, such as forests, rivers and seas, as legal interests in themselves, even in the absence of the certainty or evidence of a risk to individuals. This means that it protects nature and the environment, not only because of the benefits they provide to humanity or the effects that their degradation may have on other human rights, such as health, life or personal integrity, but because of their importance to the other living organisms with which we share the planet that also merit protection in their own right. ⁷⁹

Courts in all regions of the world have determined that the failure on the part of states to take adequate action to protect healthy ecosystems and biodiversity can violate the right to a healthy environment. As explained by the Colombian Supreme Court of Justice in 2020, the right to a healthy environment obliges states to adopt regular and effective measures that contribute to the proper functioning, maintenance, and conservation of the fauna and flora that make up the ecosystem.

Violations of the right to a healthy environment argued or found in prominent court decisions have included the following cases (listed in the Appendix as indicated by the number in square brackets):

• damaging the habitat of an endangered species (Costa Rica [6]);⁸²

⁷⁸ See J. Knox & R. Pejan (eds), The Human Right to a Healthy Environment (Cambridge University Press, 2018); D.R. Boyd, The Environmental Rights Revolution: A Global Study of Constitutions, Human Rights and the Environment (University of British Columbia Press, 2011).

⁷⁹ See *The Environment and Human Rights*, Advisory Opinion, n. 73 above, para. 62.

⁸⁰ For more on these cases, see the table of RBB cases included in the Appendix.

⁸¹ Corte Suprema de Justicia [Supreme Court], Sala de Casación Civil, 18 June 2020, M.P.: L.A. Tolosa Villabona, STC3872-2020 (Colombia), 'Corte Suprema declara sujeto de derechos al Parque Isla Salamanca', 19 June 2020, available at: https://cortesuprema.gov.co/corte/index.php/2020/06/19/cortesuprema-declara-sujeto-de-derechos-al-parque-isla-salamanca (Parque Isla Salamanca case).

⁸² Costa Rican Association of Natural Reserves v. Ministry of Environment and Energy, Judgment, Sentencia No. 20-012530-0007-CO, 2 Sept. 2008 (Supreme Court of Justice, Constitutional Chamber, Costa Rica).

- deforestation (Brazil [38, 41]), Colombia [18], India [2], and the Philippines [1]); 83
- shrimp farming in coastal wetlands (India [3]);⁸⁴
- tourism development in mangrove forests (Mexico [32]);⁸⁵
- fossil fuel development in biodiversity-rich areas (South Africa [48], Norway [21], East Africa [46]);⁸⁶
- pesticide spraying (Colombia [26], Costa Rica [35]);⁸⁷ and
- mining (Colombia [23]).88

An early articulation of the connection between the constitutional right to a healthy environment and the protection of biodiversity can be found in the 1993 ruling of the Supreme Court of the Philippines in the *Oposa* v. *Factoran* case. ⁸⁹ The youth petitioners in this case challenged the decision of the Secretary of the Department of Environment and Natural Resources to grant timber licences to corporations despite the rapid rate of deforestation of the country's tropical rainforests. The rapid destruction of these vital rainforests – and the government's contribution to it – violated, according to the petitioners, their right and the right of future generations to a balanced and healthful ecology as well as the principles of intergenerational justice and responsibility. The petitioners did not mince words: the government-sanctioned deforestation constituted 'serious injury and irreparable damage ... to the plaintiff minors' generation and to generations yet unborn'. ⁹⁰

The Supreme Court of the Philippines agreed. The deforestation described by the young petitioners did indeed constitute a violation of their right to a balanced and healthful ecology, the centrality of which the Supreme Court affirmed in powerful language:

⁸³ T.N. Godavarman Thirumulpad v. Union of India (1995), W.P.(Civil) No. 171/96 (Supreme Court, India); PSB et al. v. Brazil (on Amazon Fund), Sabin Center for Climate Change Law, Climate Change Litigation Databases, available at: http://climatecasechart.com/non-us-case/psb-et-al-v-brazil; Institute of Amazonian Studies v. Brazil, Sabin Center for Climate Change Law, Climate Change Litigation Databases, available at: http://climatecasechart.com/non-us-case/institute-of-amazonian-studies-v-brazil; Castilla Salazar v. Colombia, Decision C-035/16, 8 Feb. 2018 (Constitutional Court, Colombia), available at: https://www.corteconstitucional.gov.co/relatoria/2016/c-035-16.htm; Opasa v. Factoran [1993] G.R. No. 101083, 30 July 1993 (Supreme Court of the Philippines), available at: https://leap.unep.org/sites/default/files/court-case/Oposa%2520v%2520Factoran.pdf.

⁸⁴ Jagannath v. India, Judgment, (1996) INSC 1952 (Supreme Court, India), available at: https://indiankanoon.org/doc/507684/#:~:text=Keeping%20with%20the%20international%20comm itments,and%20protect%20the%20coastal%2Denvironments.

⁸⁵ Amparo en Revisión, Judgment, No. 307/2016, 14 Nov. 2018 (Supreme Court, First Chamber, Mexico), available at: https://www.scjn.gob.mx/derechos-humanos/sites/default/files/sentencias-emblematicas/sentencia/2020-01/AR%20307-2016.pdf.

Sustaining the Wild Coast NPC & Ors v. Minister of Mineral Resources and Energy & Ors [2022] ZAECMKHC 55 (South Africa); Greenpeace Nordic Association v. Ministry of Energy & Petroleum, Judgment, HR-2020-2472-P, 22 Dec. 2020 (Supreme Court, Norway); Centre for Food and Adequate Living Rights, n. 50 above.

Narváez Gómez v. Colombia, Judgment T-080/17 (Constitutional Court, Colombia), available at: https://www.corteconstitucional.gov.co/relatoria/2017/t-080-17.htm; Flórez-Estrada v. Ministry of Agriculture and Livestock, Sentence No. 2019-24513, 6 Dec. 2019 (Supreme Court of Justice, Constitutional Chamber, Costa Rica).

⁸⁸ Center for Social Justice Studies v. President, Judgment T-622/16, 10 Nov. 2016 (Constitutional Court, Colombia), available at: https://www.corteconstitucional.gov.co/relatoria/2016/t-622-16.htm (Atrato River case).

⁸⁹ See Opasa v. Factoran, n. 83 above.

⁹⁰ Ibid., paras 15–8.

While the right to a balanced and healthful ecology is to be found under the Declaration of Principles and State Policies and not under the Bill of Rights, it does not follow that it is less important than any of the civil and political rights enumerated in the latter. Such a right belongs to a different category of rights altogether for it concerns nothing less than self-preservation and self-perpetuation – aptly and fittingly stressed by the petitioners – the advancement of which may even be said to predate all governments and constitutions. ⁹¹

This core right to a balanced and healthful ecology carried a correlative duty on the part of the government to conserve forests for present and future generations, since, as the Court recognized, continued deforestation would mean that 'the ecological or environmental balance would be irreversibly disrupted'. ⁹² Though the Court based its decision on the violation of the right to a balanced and healthful ecology, it indicated in its ruling that the diversity of species that can be found in rich ecosystems like tropical rainforests can be considered a component of this right. This is evident, for example, in the Court's holistic framing of nature, which it defined as:

the created world in its entirety. Such rhythm and harmony indispensably include, inter alia, the judicious disposition, utilization, management, renewal and conservation of the country's forest, mineral, land, waters, fisheries, wildlife, off-shore areas and other natural resources to the end that their exploration, development and utilization be equitably accessible to the present as well as future generations.⁹³

The Constitution of Mexico establishes legal mechanisms for the protection of fundamental human rights, including the right to a healthy environment. For example, a group of citizens filed a lawsuit asserting that their constitutional right to a healthy environment was violated by the government's approval of a major tourism development in Tamaulipas, because the project would damage a mangrove ecosystem. The Supreme Court of Justice agreed that the right to a healthy environment had been violated and ordered that construction of the project be stopped and the mangroves restored. The Court affirmed that 'nature is legally entitled to be protected *per se*' and that 'no other human right is required to be infringed to determine a violation of the right to a healthy environment'. So

The Constitutional Court of Colombia has concluded that because Colombia is so rich in biodiversity, it has a special responsibility to protect the environment for the common good of humankind. The right to a healthy environment is central because humans 'need to have a healthy environment to live a dignified life in decent conditions'. However, the Court goes much further, emphasizing 'the interdependence that connects us to all living beings on earth; that is, recognizing ourselves as integral parts of the global ecosystem – the biosphere – rather than from normative categories

⁹¹ Ibid., p. 5.

⁹² Ibid., p. 6.

⁹³ Ibid., pp. 5–6.

⁹⁴ Amparo en Revisión, Decision No. CCLXXXVIII/2018 (Supreme Court, Colombia), Amparo Review 307/2016, p. 44.

⁹⁵ Ibid., p. 44.

⁹⁶ Atrato River case, n. 88 above, para. 5.10.

of domination, simple exploitation, or utility'. This understanding has its roots in the cultural and ethnic pluralism that defines the Colombian constitutional framework. Because of the deep interdependence between Indigenous and ethnic cultures and nature, 'the conservation of biodiversity necessarily leads to the preservation and protection of the ways of life and cultures that interact with it'. Moreover, '[t]he protection and preservation of cultural diversity is essential to the conservation and sustainable use of biological diversity and vice versa'. The Constitutional Court found, in a key RBB case, that the negative effects of illegal logging and mercury contamination from mining on ecosystems and the health of the inhabitants of the Atrato river region violated their fundamental rights to life, health, water, food security, a healthy environment, and culture. 100

Costa Rican courts have also been active in refining the connection between biodiversity and the right to a healthy environment. In *Costa Rican Association of Natural Reserves* v. *Ministry of Environment and Energy*, for example, the plaintiff organization challenged a government resolution permitting the exploitation and commercialization of a certain type of almond tree in a conservation area, which reduced the habitat of the green macaw (an endangered species) and ultimately, according to the plaintiff, violated the constitutional right to a healthy and ecologically balanced environment. ¹⁰¹ The Constitutional Chamber of the Costa Rican Supreme Court of Justice agreed. Finding that the administrative resolution does not, among other things, 'extensively analyze the implications that it entails for the environment, and especially for those beings whose subsistence on the planet runs an ostensible risk', and citing the government's international and domestic commitments – especially vis-à-vis the CBD – to protect endangered species and the habitats on which they depend for survival, the Court concluded that the resolution entailed a 'serious violation' of the Costa Rican Constitution. ¹⁰² The resolution was, as a result, annulled.

The same court also found in two recent cases that the toxic pollution of the environment – including through the use of bee-killing neonicotinoids (a chemical found in pesticides) and illegal gold mining – can constitute a violation of the constitutional right to a healthy and ecologically balanced environment, in part because of its deleterious effect on biodiversity. ¹⁰³

The Supreme Court of India has similarly been very active in cases involving human rights, the protection and conservation of ecosystems and biodiversity, and the rights of animals. The state has a clear obligation under Part IV, Article 48A of the Constitution

⁹⁷ Ibid., para. 5.10.

⁹⁸ Ibid., para. 5.11.

⁹⁹ Ibid.

¹⁰⁰ Ibid.

¹⁰¹ See Costa Rican Association of Natural Reserves v. Ministry of Environment and Energy, No. 07-012530-0007-CO, 2 Sept. 2008 (Supreme Court of Justice, Constitutional Chamber, Costa Rica).

¹⁰² Ibid., s. IV.

¹⁰³ For information on Flórez-Estrada v. Ministry of Agriculture and Livestock and Federation for the Conservation of the Environment v. Ministry of Environment & Energy, see 'Sentencias Relevantes de la Sala Constitucional #8 – Edición Enero 2020', Sala Constitucional (Costa Rica), Jan. 2020.

of India to protect and improve the environment and safeguard forests and wildlife. ¹⁰⁴ There is a similar fundamental duty for citizens under Article 51A(g). ¹⁰⁵ The Supreme Court has noted these provisions and read them along with other fundamental rights, particularly Articles 14 (equality) and 21 (life), to develop a constitutional framework of interconnected rights, obligations, and duties related to nature conservation and ecological protection. For example, in the long-standing *Godavarman* case, originally filed in 1995, the Supreme Court of India has passed many orders requiring the government to protect forests, parks, wildlife sanctuaries and other areas, and conserve their biodiversity. ¹⁰⁶ The Court stated that '[c]onservation includes preservation, maintenance, sustainable utilisation, restoration, and enhancement of the natural environment'. ¹⁰⁷ In 2017, moreover, in response to a public interest lawsuit, the Supreme Court ordered a national inventory of almost 200,000 wetlands. ¹⁰⁸

As these precedents and others show, challenging impacts on biodiversity on the basis of the right to a healthy environment has been a fruitful avenue for litigators around the world. Indeed, this body of case law demonstrates that both litigators and courts have accepted that the biological diversity that is so crucial for healthy ecosystems is a vital component of the right to a healthy, safe, and sustainable environment. The newfound traction of the right in the light of its recent recognition by the UN as an international human right thus is likely to contribute to the advancement of RBB litigation.

(2) Cases based on civil, political, or socio-economic rights

Petitioners and courts in RBB litigation have made use of arguments based on violations of civil, political, and socio-economic rights – often in addition to arguments based on the right to a healthy environment – to support their claims and rulings.

For instance, in the Filipino case of *Resident Marine Animals of the Protected Seascape Tañon Strait* v. *Reyes*, the petitioners challenged a project permitting the exploration, development, and exploitation of oil resources in the Tañon Strait as a violation of the right of fisherfolk to the preferential use of communal fishing waters as well as the right of Filipino citizens under the Constitution to use and enjoy the country's resources, in addition to alleging a violation of the right to a balanced and healthful ecology. ¹⁰⁹ The Philippines Supreme Court took these arguments into account and found that, given the alleged harm to the environment and livelihoods – as well as the obligations with which the defendants were required to comply under environmental

¹⁰⁴ Constitution of India (1949), Art. 48A.

¹⁰⁵ Ibid., Art. 51A(g).

¹⁰⁶ See T.N. Godavarman Thirumulpad v. Union of India (1995), W.P. (Civil) No. 171/96 (India).

¹⁰⁷ Ibid

¹⁰⁸ Balakrishnan v. Union of India (2017), W.P. 19367/2014 (India).

¹⁰⁹ See Resident Marine Animals of the Protected Seascape Tañon Strait v. Reyes, G.R. No. 18077, 21 Apr. 2015 (Supreme Court of the Philippines), available at: https://leap.unep.org/sites/default/files/court-case/Resident%2520Marine%2520.pdf.

law, but did not – the challenged project was null and void for its inconsistency with the Constitution. 110

Similarly, in the Colombian *Atrato River* case, the petitioners alleged that the socio-economic, health, and environmental harm inflicted on ethnic communities and farmers in the area, as a result of the government's failure to redress the degradation of the Atrato river and its basin and tributaries, constituted violations of these people's rights to life, health, water, food security, culture, and territory, in addition to the right to a healthy environment. ¹¹¹ The Constitutional Court ultimately agreed, finding that 'in the case submitted to its study, there is a serious violation of the rights to life, health, water, food security, a healthy environment, the culture and the territory of the ethnic communities that inhabit the Atrato River Basin, its tributaries and surrounding territories'. ¹¹² The Court then issued a series of orders intended to rectify the violation of this array of rights.

(3) Cases based on Indigenous rights

Many RBB cases overlap extensively with concerns for Indigenous rights and underscore the particularly profound impacts of environmental degradation and biodiversity loss on Indigenous communities. Indeed, perhaps the clearest framing of biodiversity as a rights issue that is available in the extant jurisprudence can be found in legal challenges brought by or on behalf of Indigenous peoples against policies or projects that pose serious threats to both their culture and the biodiversity of the territories they inhabit. To put it in terms used by anthropologist Wade Davis, these cases show the intimate relation between threats to the *biosphere* and threats to the *ethnosphere* (that is, the diversity of cultures that Indigenous peoples represent and defend). This jurisprudential connection is particularly clear in landmark rulings in Latin American jurisdictions.

For instance, in the *Atrato River* case, the Colombian Constitutional Court, though basing its decision more substantially on the right to a healthy environment, clearly articulated the deep and specific relationship that Indigenous communities have with biodiversity and their surrounding ecosystems:

The international instruments, along with the cases and the regional and global experiences here reviewed, show the growing recognition of the need to protect the intrinsic and interdependent relationships of Indigenous peoples and ethnic communities with their natural habitat, their territories, its resources and with biodiversity. The relationships and particular meanings of plants, animals, mountains, rivers and other constituent

¹¹⁰ Ibid.

¹¹¹ Atrato River case, n. 88 above, para. 2.10.

¹¹² Ibid., para. 9.39.

¹¹³ On the flip side, Indigenous communities play a significant role in protecting nature and biodiversity; see, e.g., Díaz et al., n. 1 above, pp. 31–3.

¹¹⁴ See W. Davis, The Wayfinders: Why Ancient Wisdom Matters in the Modern World (House of Anansi Press, 2009).

elements of the territory in each culture are recognized as part of the distinctive ways of life of ethnic communities. 115

In 2020, the Inter-American Court of Human Rights issued a ruling in *Lhaka Honhat Association* v. *Argentina*, which focused on the Argentinian government's long-term failure to grant effective legal title to the petitioner Indigenous communities over their ancestral lands, as well as the environmental harm generated by illegal logging, cattle ranching, and sanctioned oil exploration. The Indigenous petitioners alleged substantial violations of their fundamental rights. The Court concluded that the Indigenous peoples' right to a healthy environment was violated by the degradation of the forests and biodiversity. The Court required Argentina to submit a plan to provide the Indigenous communities with access to their traditional territory, with a particular focus on the conservation of waters and the protection and recovery of forests. 118

Importantly, some of the cases that offer the clearest articulation of the link between biodiversity and human rights also relate to the right of Indigenous peoples to free, prior and informed consultation and consent as a key legal mechanism for protecting both the biosphere and the ethnosphere vis-à-vis policies or projects that affect Indigenous territories. For instance, in the Colombian case *Sentencia T-236/17*, the Constitutional Court sided with the Indigenous and Afro-descendent petitioners who challenged the aerial spraying of glyphosate in their communities as part of the government's response to coca crops. ¹¹⁹ As shown by the experts who participated in the legal action, aerial spraying of glyphosate put directly in danger the species and ecosystems of the highly biodiverse territory that the plaintiffs inhabit on the Pacific Coast. Though the Court emphasized the direct affect that the spraying had on the petitioners' relationship with the land, the sources of water, and the environment of their territories, it ultimately based its decision primarily on the right to prior consultation and the precautionary principle. ¹²⁰

(4) Cases based on the Rights of Nature

Many RBB cases implicate the rights of particular species or the rights of nature more generally, oftentimes advancing a more holistic or ecocentric view of nature. 121

¹¹⁵ Atrato River case, n. 88 above, at para. 5.21.

¹¹⁶ Indigenous Communities of the Lhaka Honhat (Our Land) Association v. Argentina, n. 75 above.

¹¹⁷ Ibid., paras 258-89.

¹¹⁸ Ibid., paras 306–36. For more information, see also M.A. Tigre, 'The Inter-American Court Recognizes the Right to a Healthy Environment' (2020) 24(14) *Insights: American Society of International Law*, available at: https://www.asil.org/insights/volume/24/issue/14/inter-american-court-human-rights-recognizes-right-healthy-environment.

See Sentencia T-236/17, Expediente T-4.245.959, 21 Apr. 2017 (Constitutional Court, M.P.: A. Arrieta Gómez, Colombia), available at: https://www.corteconstitucional.gov.co/relatoria/2017/T-236-17.htm.

¹²⁰ Ibid

For more on the rights of nature and non-humans see, e.g., C. Kauffman & P.L. Martin, The Politics of the Rights of Nature: Strategies for Building a More Sustainable Future (The MIT Press, 2017);
 D.R. Boyd, The Rights of Nature: A Legal Revolution that Could Save the World (ECW Press, 2017);
 W. Kymlicka, 'Human Rights Without Human Supremacism' (2018) 48(6) Canadian Journal of Philosophy, pp. 763–92.

For example, in cases involving the endangered Asiatic lion and Asiatic wild buffalo, the Supreme Court of India established and applied a 'species best interest standard', meaning that government decisions must prioritize the survival and recovery of species threatened by extinction. ¹²² In the Court's words, 'we must focus our attention to safeguard the interest of species, as species has equal rights to exist on this earth'. ¹²³ Similarly, the Court stated that '[w]hen we look at the rights of animals from the national and international perspective, what emerges is that every species has an inherent right to live and shall be protected by law, subject to the exception provided out of necessity'. ¹²⁴

In *Islamabad Wildlife Management Board* v. *Metropolitan Corporation Islamabad*, Pakistan's Islamabad High Court was asked to examine claims seeking to protect the welfare of specific animals and determine what rights, if any, animals had. 125 According to the Court, 'like humans, animals also have natural rights which ought to be recognized. It is a right of each animal, a living being, to live in an environment that meets the latter's behavioral, social and physiological needs'. 126 In coming to this conclusion, the Court offered an ecocentric framing of nature, emphasizing humanity's existence within and dependence on the natural and animal world:

The existence of the human species on this planet is dependent on other living organisms such as plants and animals. The habitats of animals are equally essential. The human civilization and its destruction of the habitat, ecosystems and obliteration of species has threatened the biodiversity of the planet. ... The welfare, wellbeing and survival of the animal species is the foundational principle for the survival of the human race on this planet. Without the wildlife species there will be no human life on this planet. It is, therefore, obvious that neglect of the welfare and wellbeing of the animal species, or any treatment of an animal that subjects it to unnecessary pain or suffering, has implications for the right of life of humans guaranteed under Article 9 of the Constitution. 127

In Ecuador, the first country to incorporate the rights of nature into its Constitution, a legal challenge to the Ministry of the Environment's decision to authorize mineral exploration in the protected forest area of Los Cedros led to a landmark ruling by the Constitutional Court. The Court held that the rights of nature guaranteed under the Constitution include protection against the extinction of species as well as the destruction of ecosystems and permanent alteration of natural cycles. It specifically highlighted the importance of biodiversity to the stability of ecosystems and, crucially, noted that biodiversity was an 'object of intrinsic value' under the Ecuadorian

¹²² Centre for Environmental Law v. Union of India, (2013) 8 SCC 234, paras 40, 49.

¹²³ Ibid., para. 47.

¹²⁴ Animal Welfare Board of India v. Nagaraja (2014) 2014(4)ABR556, para. 51, available at: https://www.nonhumanrights.org/wp-content/uploads/Animal-Welfare-Board-v-A.-Nagaraja-7.5.2014. pdf.

See Islamabad Wildlife Management Board v. Metropolitan Corporation Islamabad et al., W.P. No. 1155/2019, 21 May 2022 (High Court of Islamabad, Pakistan).

¹²⁶ Ibid., p. 59.

¹²⁷ Ibid., para. 6(f).

¹²⁸ See GAD Santa Ana de Cotacachi v. Ministry of Environment, Water and Ecological Transition, Case No. 1149-19-JP/20, 10 Nov. 2021, Constitutional Court (Ecuador).

constitution. 129 Applying the precautionary principle to the facts of the case, the Court concluded that mineral exploitation in Los Cedros does, in fact, trigger the government's obligation to take precautionary measures, in large part because of the risk that this type of extractive activity poses to the species and genetic diversity of Los Cedros. The government's failure to take these measures ultimately meant that it violated the rights of nature as guaranteed under the Constitution.

4. RIGHTS-BASED BIODIVERSITY LITIGATION: FUTURE OPPORTUNITIES AND CHALLENGES

As illustrated by the cases analyzed in the previous section and others included in our database (see Appendix), RBB litigation has the potential to evolve into a global field of research and practice. Just as HRCC litigation did in the 2010s, RBB cases may emerge in the 2020s as a consistent and frequent tool for litigants to hold governments and private actors accountable for biodiversity loss; catalyze more ambitious laws, policies, and actions to protect biodiversity and ecosystems; and enforce national and international biodiversity norms and targets.

Whether RBB litigation becomes a longer-term, robust trend will depend on the way in which key actors – from litigants to judges to civil society organizations and Indigenous peoples – seize key opportunities and address persistent challenges that lie ahead. Before concluding, we highlight four main opportunities and three core challenges.

As for the opportunities, the first is the wealth of legal doctrines and strategic lessons that can be extracted not only from past RBB cases but also from HRCC litigation, other forms of human rights advocacy (especially strategic litigation), and biodiversity litigation writ large. As noted, RBB litigants have at their disposal a range of domestic and international law arguments that can be applied directly or adapted to tackle the human rights impacts of the biodiversity emergency. For the purposes of this article, we highlighted the lessons from the recent wave of HRCC lawsuits, including the effective use of scientific expertise to demonstrate such impacts, the formulation of new legal doctrines or the creative reinterpretation of existing ones (from the rights of future generations to extraterritorial obligations for environmental harm), and the crafting of adequate remedies to match the urgency and the scale of the problem.

Secondly, the recent recognition of a universal right to a healthy environment by the UN Human Rights Council and the UN General Assembly provides RBB litigants and courts with additional normative support for new lawsuits and rulings. As is evident in the table in the Appendix, the right to a healthy environment has been invoked frequently in RBB cases. With UN recognition, it is to be expected that UN bodies, the international legal community, domestic courts, and civil society organizations

¹²⁹ Ibid., paras 47–50.

will further leverage this soft law tool as well as specify its doctrinal and practical implications for the protection of biodiversity. ¹³⁰

Thirdly, the growing trend towards the setting of specific targets in biodiversity governance and policy provides an important opportunity for RBB litigation. For instance, the target to protect 30% of the planet (land and sea) by 2030 in the Kunming-Montreal Global Biodiversity Framework¹³¹ provides litigants with a quantitative benchmark that they can ask courts to enforce in specific cases, like HRCC litigants have done with the Paris Agreement goal of keeping global warming to 1.5°C. Similarly, as future IPBES reports specify the national contributions that would be needed to attain the '30 by 30' goal, and as governments make national pledges, RBB litigation may be used to turn those targets, as well as commitments in the CBD, into enforceable actions at the domestic level.

Beyond legal opportunities, an important precondition for the rise of the RBB litigation field is the consolidation of an epistemic and professional community of RBB practitioners. Again, one of the key factors explaining the rapid expansion of HRCC lawsuits since the late 2010s is the cross-fertilization and cross-referencing of cases filed in various jurisdictions around the world. Civil society organizations – including Greenpeace, ClientEarth, Plan B, Friends of the Earth, Urgenda, the NYU Climate Law Accelerator, the Center for International Environmental Law, and several others, as well as several UN special rapporteurs (human rights and the environment, human rights and toxics) – have not only filed lawsuits or *amicus curiae* briefs in key cases but have also served as field catalysts by quickly applying and disseminating doctrines and strategies from other cases. These and other organizations (notably some of the pioneer actors in biodiversity litigation, such as the Center for Biological Diversity, Earthjustice, and Ecojustice) could play a similar role in RBB litigation. Adding to opportunities for the consolidation of an RBB community of practice, recent scholarship is beginning to compile global surveys and analyses of biodiversity litigation. ¹³²

However, for RBB litigation to consolidate itself as a field of knowledge and practice, three core challenges need to be addressed. Firstly, RBB cases need to be based on a more conceptually nuanced, legally precise, and scientifically robust understanding of the connection between biodiversity and human rights. As noted, most lawsuits and rulings in our database mention biodiversity loss as one among many types of environmental harm associated with the policy or action being challenged – be it the authorization of a mining or logging operation, the use of pesticides, the construction of a tourism facility in a fragile ecosystem, the lack of action against deforestation, and so on. Similarly, human rights violations tend to be framed as one among many consequences of such policies and actions. As a result, the connection between biodiversity loss and human rights is often underspecified, and biodiversity loss receives less

¹³⁰ Foreshadowed by the 2020 report of the Special Rapporteur on Human Rights and the Environment to the General Assembly, see UNHCR, n. 71 above.

¹³¹ Kunming-Montreal Global Biodiversity Framework, n. 23 above, para. 31, Target 2.

¹³² See G. Futhazar, S. Maljean-Dubois & J. Razzaque, 'Biodiversity Litigation: Review of Trends and Challenges,' in Futhazar, Maljean-Dubois & Razzaque, n. 20 above, pp. 359–400.

attention in the cases under examination than other environmental impacts like climate change and pollution. What is missing is the type of more precise legal doctrine (for example, the 'fair share' contribution of each country to climate action) and scientific grounds (such as attribution science) that have emerged in HRCC litigation to demonstrate the legal and causal links between global warming and human rights violations. ¹³³

A second, related challenge is the absence of cases that are intentionally built to fill those gaps. Although existing cases have made important contributions and planted the seeds for the emergence of the RBB field, our global survey did not find evidence of any case that offers a focused, systematic, and deliberate framing of biodiversity loss as a matter of human rights law. Therefore, the challenge is to develop a case, or set of cases, that can serve as foundational precedents and play the functional role that *Urgenda*, *Neubauer*, Brazil's Climate Fund case, and other pioneering lawsuits and court rulings have played in HRCC litigation.

Beyond legal gaps, a third challenge for RBB litigants is building synergies with key actors that are making important contributions to biodiversity protection and governance, from scientists to Indigenous peoples to environmental and human rights organizations. One of the main reasons behind the dynamism and vibrance of HRCC litigation is the fact that many of the key lawsuits like *Neubauer* v. *Germany*¹³⁴ and *Milieudefensie* v. *Shell*¹³⁵ have been filed by coalitions of law-oriented non-governmental organizations (NGOs) and social movement organizations, often in cooperation with climate scientists. The predominance of this brand of impact lawyering in the climate field has tended to provide HRCC litigation with societal and scientific support, which in turn has increased its impact and legitimacy. RBB litigants, who have in general yet to build these bridges, can learn from rights-based climate legal challenges as they continue their efforts to address the biodiversity emergency and its profound implications for human and non-human rights.

5. CONCLUSION

The stark and startling collapse of biodiversity across the planet poses a particularly dire threat to Indigenous peoples, peasants, and other communities whose livelihoods, cultures, well-being, and human rights depend on nature. Yet, the undeniable physical reality is that all humans depend on healthy ecosystems and biodiversity for the holy trinity of life's fundamental elements: the air we breathe, the water we drink, and the food we eat. While the global biodiversity crisis is less salient than the global climate crisis, its potential consequences are equally catastrophic. Just as carbon dioxide levels in the atmosphere are at their highest level in millions of years, so too are rates of extinction.

¹³³ See Burger, Wentz & Metzger, n. 61 above.

^{134 &#}x27;Constitutional Complaints against the Federal Climate Change Act Partially Successful', Bundesverfassungsgericht, 29 Apr. 2021, available at: https://www.bundesverfassungsgericht.de/ SharedDocs/Pressemitteilungen/EN/2021/bvg21-031.html.

Milieudefensie v. Royal Dutch Shell, RDH, 26 May 2021, C/09/571932 / HA ZA 19-379, ECLI:NL: RBDHA:2021:5337 (District Court of The Hague, The Netherlands).

Rights-based litigation does not offer a comprehensive solution to either of these pressing problems. However, it is a tool that can be used by people, communities, and organizations concerned about these twin crises to try and accelerate action and achieve accountability. For a long time, rights-based litigation has been employed successfully by social movements seeking to bring about transformative changes, including the abolitionists, the suffragettes, the civil rights movement, pro-democracy advocacy networks, and the anti-apartheid movement. ¹³⁶ The climate and environmental justice movements are striving to emulate and build upon these precedents.

The early successes of human rights-based climate litigation have offered a beacon of hope to activists looking for light in an era of darkness. The parallels of HRCC litigation with RBB litigation point to another source of light. Both fields of litigation seek to transform a global economy based on the exploitation of people and the planet, a gargantuan undertaking that faces fierce opposition from vested interests. We urge the adoption of the courageous approach, as articulated by a British judge in one of the first cases where a slave was freed based on human rights arguments: 'Let justice be done, though the heavens may fall'. ¹³⁷

¹³⁶ For a particularly compelling overview of the trajectory of human rights, see K. Sikkink, Evidence for Hope: Making Human Rights Work in the 21st Century (Princeton University Press, 2017).

¹³⁷ Somerset v. Stewart (1772) 98 ER 499, p. 509.

APPENDIX

Rights-Based Biodiversity Litigation Chart

No.	Year (filing /decision)	Status	Case Name	Jurisdiction	Plaintiffs	Argument	Legal Basis
1	1993 (decision)	Decided	Oposa v. Factoran	The Philippines Supreme Court of the Philippines	Youth petitioners and environmental NGO	Alleging that the government's approval of excessive timber licences – endangering the country's tropical rainforests through rapid deforestation – violates the petitioners' and future generations' constitutional right to a balanced and healthful ecology and the rights to self-preservation and self-preservation found under natural law, as informed by the principles of intergenerational justice and responsibility.	Philippines Constitution; domestic environmental policy; principles of intergenerational justice and responsibility
2	1995 (filed)	Decided	T.N. Godavarman Thirumulpad v. India	India Supreme Court of India	Indian citizen on behalf of the people living in and around the Nilgiri Forest on the Western Ghats	Alleging that the actions of government officials (the State of Tamil Nadu, the Collector, Nilgiris District and the District Forest Officer, Gudalur and the Timber Committee) in permitting and contributing to the destruction of the tropical rainforest in the Gudalur and Nilgiri areas violate domestic environmental law as well as the people's constitutional right to a clean and healthy environment, and have negatively affected their lives and livelihoods.	Indian Constitution; domestic environmental law (Forest Act, 1927; Forest (Conservation) Act, 1980; Tamil Nadu Hill Stations Preservation of Trees Act; Environment (Protection) Act, 1986)

Appendix (Continued)

No.	Year (filing /decision)	Status	Case Name	Jurisdiction	Plaintiffs	Argument	Legal Basis
3	1996 (decision)	Decided	Jagannath v. India	India Supreme Court of India	Individual on behalf of Gram Swaraj Movement, an NGO	Alleging that intensive and semi-intensive forms of shrimp farming in India have severely degraded the coastal and marine environments, with negative socio-economic and environmental consequences for rural peoples and in violation of applicable domestic law.	Coastal Zone Regulation Notification of 1991;
4	2004 (filed) 2007 (decision)	Decided	Watte Gedera Wijebanda v. Conservatory General of Forests	Sri Lanka Supreme Court of Sri Lanka	Individual	Alleging that the government's refusal to grant the petitioner a permit for quarry mining of silica quartz in an environmentally sensitive area violates his fundamental rights. The petitioner also alleged that the refusal was discriminatory, violating his right to equal treatment.	Sri Lankan Constitution (including the fundamental rights provisions)
5	2007 (decision)	Decided	Khabisi v. Aquarella Investment	South Africa High Court of Pretoria	Environmental governance officials	Alleging that the respondent corporate entities failed to comply with notices the applicant environmental officials issued to halt the development of the corporate respondents' properties, which would have failed to comply with environmental regulations as well as having an impact on the constitutional right to a healthy environment given the development's effects, inter alia, on sensitive ecosystems and biodiversity.	South African Constitution; domestic environmental law (including the National Environmental Management Act and the Environment Conservation Act)

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No.	Year (filing /decision)	Status	Case Name	Jurisdiction	Plaintiffs	Argument	Legal Basis
6	2008 (decision)	Decided	Costa Rican Association of Natural Reserves v. Ministry of Environment and Energy [Sentencia N° 20-012530-0007-CO]	Costa Rica Supreme Court of Justice, Constitutional Chamber	Costa Rican Association of Natural Reserves	Alleging that a resolution issued by the Ministry of Environment and Energy and an official overseeing the Arenal Huetar Norte Conservation Area permitting the exploitation and commercialization of a species of almond tree impermissibly encroaches upon the habitat of the green macaw, violating domestic environmental law and the constitutional right to a healthy environment.	Constitution;
7	2008 (filed)	Decided	Wildlife First v. Ministry of Environment & Forest	India Supreme Court of India	Conservation NGOs	Alleging that the Forest Rights Act – which grants forest rights to peoples who reside in the forest or depend on it for their livelihoods – is constitutionally impermissible because it has led to deforestation and encroachment into the forest.	
8	2008 (decision)	Decided	Mendoza v. Argentina [Expediente M. 1569 XL]	Argentina Supreme Court of Argentina	650 citizens of the province of Santiago de Chuco	Alleging that an ordinance – intended to protect sources of freshwater within the municipal jurisdiction – is unconstitutional because it usurps regulatory authority from other parts of the government and infringes the plaintiffs' right to property. The ordinance would prevent companies that have mining operations in the area or which plan to mine from conducting such activities, even though they have the necessary titles and permits.	Argentinian Constitution; the municipal ordinance; Water Resources Act; domestic statutes on municipalities and decentralization
9	2010 (filed) 2014 (decision)	Decided	African Network for Animal Welfare v. Attorney General of Tanzania	East Africa East African Court of Justice, Arusha First Instance Division	African Network for Animal Welfare	Challenging the government of Tanzania's decision to build a highway through the northern wilderness of the Serengeti National Park, alleging that such an action would substantially degrade and damage ecosystems, in contradiction of the government's obligations to preserve natural and cultural heritage and its obligations under international environmental law.	East Africa Treaty; UNESCO; African Convention on the Conservation of Nature and Natural Resources, 2003; Rio Declaration; Stockholm Declaration; CBD

Appendix (Continued)

No.	Year (filing /decision)	Status	Case Name	Jurisdiction	Plaintiffs	Argument	Legal Basis
10	2012 (filed)	Decided	Indigenous Peoples' Alliance of the Archipelago v. Indonesia	Indonesia Constitutional Court of Indonesia	Indigenous Peoples' Alliance of the Archipelago; Indigenous Peoples of Kenegerian Kuntu; Indigenous Peoples of Kaspuhan Cisitu	Alleging that the government has used the Forestry Law to appropriate land from Indigenous peoples, in violation of their rights over their customary forest territories.	Indonesian Constitution; Forestry Law
11	2013 (decision)	Decided	Centre for Environmental Law v. India	India Supreme Court of India	Centre for Environmental Law; WWF-I	Challenging the inertia of a decades-long project to relocate/reintroduce the Asiatic lion, arguing that the project has stalled as a result of state government inaction. The lack of progress on this project threatens the species' long-term survival.	Indian Constitution; Wildlife Protection Act; Biological Diversity Act
12	2013 (decision)	Decided	Orissa Mining Corporation Ltd v. Ministry of Environment & Forest	India Supreme Court of India	Orissa Mining Corporation	Challenging the Ministry of the Environment's decision to reject the company's request to clear a section of forest to mine bauxite ore, on the basis that it was not consistent with applicable law.	Domestic environmental and administrative law
13	2013 (decision)	Decided	Bulga Milbrodale Progress Association v. Minister for Planning and Infrastructure	Australia Land and Environment Court, New South Wales	Bulga Milbrodale Progress Association	Challenging the decision of the Minister for Planning and Infrastructure to approve the expansion of an open cut coal mine on the basis that the extension would have significant and unacceptable impacts, including impacts on biodiversity and endangered species as well as socio-economic impacts for the affected communities.	Domestic environmental law (including biodiversity laws)

Appendix (Continued)

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No.	Year (filing /decision)	Status	Case Name	Jurisdiction	Plaintiffs	Argument	Legal Basis
14	2014 (filed) 2021 (decision)	Decided	Comunidad Indígena de Campo Agua, del pueblo Ava Guaraní v. Paraguay	United Nations UN Human Rights Committee	Representatives of the Indigenous Community of Campo Agua'ē	Alleging that the harm suffered by the Indigenous Community of Campo Agua'ē – including harm to their territory's biodiversity – as a result of toxic pollution by commercial operations through pesticide fumigation constitutes a violation of their rights protected under the ICCPR and the government of Paraguay's obligations thereunder.	Covenant on Civil and Political Rights (ICCPR) and
15	2014 (decision)	Decided	Animal Welfare Board of India v. Nagaraja	India Supreme Court of India	Animal rights organizations	Challenging, among other things, the continued practice of Jallikattu – bullock-cart racing – in the States of Tamil Nadu and Maharashtra as prohibited under the Prevention of Cruelty to Animals Act.	Indian Constitution; Prevention of Cruelty to Animals Act; animal regulations
16	2015 (decision)	Decided	Biodiversity Management Committee Eklahara v. Western Coalfields Ltd	India National Green Tribunal, Central Zone Bench, Bhopal	Biodiversity Management Committee of Eklahara	Seeking for coal to be declared a 'biological resource' and challenging the government's decision to not recognize it as such. Recognizing coal as such would require the entities extracting coal within the Committee's jurisdiction to equitably share the benefits of the resource.	Biological Diversity Act; CBD
17	2015 (decision)	Decided	Resident Marine Animals of the Protected Seascape Tañon Strait v. Angelo Reyes	Philippines Supreme Court of the Philippines	Marine mammals of the Tañon Strait	Challenging the government's decision to permit the exploration, development, and exploitation of oil resources in the Tañon Strait, alleging that the harm it imposes on marine animals violates the Philippines Constitution (including the petitioners' constitutional rights) as well as domestic and international environmental law.	Philippines Constitution; domestic environmental law; international environmental law
18	2015 (decision)	Decided	Castilla Salazar v. Colombia [Decision C-035/16]	Colombia Constitutional Court of Colombia	Colombian citizens	Challenging the constitutionality of certain laws establishing provisions of Colombia's National Development Plan on the basis that they threatened the health of the <i>páramos</i> (high altitude ecosystems) and infringed constitutional rights, including the right to a healthy environment.	Colombian Constitution; domestic environmental law; domestic development law

Appendix (Continued)

Appendix (Continued)

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No.	Year (filing /decision)	Status	Case Name	Jurisdiction	Plaintiffs	Argument	Legal Basis
19	2015 (decision)	Decided	Case of the Kaliña and Lokono Peoples v. Suriname	The Americas Inter-American Court of Human Rights	Indigenous rights groups and representatives of the Kaliña and Lokono Indigenous Peoples	Alleging that the government of Suriname has violated, inter alia, the right to collective property of the Kaliña and Lokono Indigenous peoples by failing to establish a legal framework that recognizes the legal personality of Indigenous peoples and by failing to establish a legal and regulatory framework that allows for the recognition of the right to collective ownership of the lands, territories and natural resources of these Indigenous communities.	American Convention on Human Rights
20	2016 (decision)	Decided	People v. Pachay Murillo [Proceso 09171-2015-0004]	Ecuador Ninth Court of Criminal Guarantees of the Guayas	Criminal case (defendants involved in fishing)	The defendants were charged with illegally fishing sharks within the Galapagos Marine Reserve, which is an environmental crime under law.	Ecuadorian Constitution; criminal statute; international environmental and human rights law
21	2016 (filed) 2020 (Supreme Court decision)	Decided	Greenpeace Nordic Association v. Ministry of Energy & Petroleum	Norway Supreme Court of Norway	NGOs	Challenging the constitutionality of the Norwegian government's decision to license new blocks of the Barents Sea for deep-sea oil and gas extraction. Based on the rights to life, private and family life, health, an environment that is conducive to health and to a natural environment the productivity and diversity of which are maintained, and the no-harm principle.	Norwegian Constitution; European Convention on Human Rights; International Covenant on Economic, Social and Cultural Rights
22	2016 (filed)	Pending	Ali v. Pakistan	Pakistan Supreme Court of Pakistan	Pakistani child	Challenging various actions and inactions by the federal and provincial governments, including plans to develop the Thar Coalfield. Based on the rights to life, dignity, property, equality, and the principles of sustainable development and intergenerational equality.	Pakistani Constitution; Pakistani National Climate Policy and Framework of 2012; Public Trust Doctrine; Paris Agreement

No. Year (filing /decision) Status Case Name **Jurisdiction Plaintiffs Legal Basis** Argument Center for Social Alleging that the damage done to the Atrato river Colombian 23 2016 Decided Colombia Minority and its surrounding ecosystems by intensive (decision) **Iustice Studies** Constitutional communities Constitution: v. President Court of and farmers in mining and illegal logging violates the petitioners' international and fundamental rights to life, health, water, food [Atrato River case] Colombia the Chocó domestic security, a healthy environment, and culture and environmental law region territory; asking the Court to issue orders detailing structural solutions to redress the situation. 2.4 2016 Decided **Future Generations** Colombia 25 young Challenging the government's failure to comply Colombian with its commitment to reduce deforestation in the Constitution; Paris (filed) v. Ministry of the Supreme Court persons of Colombia Amazon to net zero by 2020 as a violation of the Agreement; principles 2018 Environment (decision) youth petitioners' fundamental rights, including of intergenerational the rights to life, food, water, health, and a healthy equity, solidarity, participation, and best environment. interests of the child Decided 2017 Shrestha v. Nepalese citizen Alleging that the government's failure to take Nepalese Nepal sufficient action to mitigate and adapt to climate (filed) Prime Minister Supreme Constitution: Court of Nepal change (including through the failure to adopt a 2018 domestic specific climate change law) violated the Nepalese environmental law; (decision) Constitution, domestic environmental law, and international climate international law. law Challenging the fumigation of illicit crops by aerial Colombian 26 2017 Decided Narváez Gómez Colombia Indigenous spraying of glyphosate as a violation of the (filed) v. Colombia Constitutional Constitution: communities [Sentencia 080/17] petitioners' fundamental rights protected under 2018 Court of precautionary the Colombian Constitution, including their rights principle; UN (decision) Colombia to life, cultural and spiritual survival, prior Declaration on the participation and consultation, physical and Rights of Indigenous cultural existence, due process, freedom of Peoples development of the personality, education, and a healthy environment.

Appendix (Continued)

Appendix (Continued)

No.	Year (filing /decision)	Status	Case Name	Jurisdiction	Plaintiffs	Argument	Legal Basis
27	2017 (opinion)	Decided	Advisory Opinion on the Environment and Human Rights (OC-23/17)	The Americas Inter-American Court of Human Rights	Colombia	In an advisory opinion, the IACtHR recognized the right to a healthy environment as a human right, based on the rights to life and personal integrity.	American Convention on Human Rights
28	2017 (filed)	Decided (2021)	FUNDAZOO v. Costa Rica	Costa Rica Supreme Court of Justice, First Chamber	NGO	Challenging the government's actions associated with moving Kivú the lion from the plaintiff's zoo as violations of applicable laws and its obligation to promote the welfare of the environment, which includes animals.	Animal welfare law
29	2017 (decision) 2018 (decision)	Decided Decided	Sentencia T-236/17 Auto 387/19 (compliance order)	Colombia Constitutional Court of Colombia	Personería of the municipality of Nóvita, Chocó	Alleging that the eradication of coca leaves through glyphosate aerial spraying violates Indigenous communities' fundamental rights, including their rights to a healthy environment, prior consultation, health, self-determination, and cultural and ethnic identity; seeking consultation with and compensation for affected Indigenous and Afro-descendent peoples.	Colombian Constitution; International Labour Organization (ILO) Convention 169; UN Declaration on the Rights of Indigenous Peoples; American Convention on Human Rights; precautionary principle
30	2018 (decision)	Decided	Reyes v. Colombia [Sentencia T-307/18]	Colombia Constitutional Court of Colombia	Indigenous communities	Challenging an administrative act regulating the use, sale, etc. of seeds as a violation of the petitioners' fundamental rights as Indigenous and tribal peoples, including their right to prior consultation, due process, the vital minimum, and identity and cultural integrity, because it was passed without prior consultation, despite the fact that it directly affects traditional practices of the Indigenous communities related to the custody and conservation of native and creole seeds.	Colombian Constitution; agency resolution; administrative law; ILO Convention 169

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Appendix (Continued)

No.	Year (filing /decision)	Status	Case Name	Jurisdiction	Plaintiffs	Argument	Legal Basis
31	2018 (filed) 2020 (decision)	Decided	Indigenous Communities of Lhaka Honhat Association v. Argentina	The Americas Inter-American Court of Human Rights	Indigenous Communities of Lhaka Honhat Association	Alleging that the Argentinian government's failure to grant the Indigenous communities title to their ancestral lands, its failure to control the illegal deforestation in Indigenous territory, and its approval of oil and gas exploration in the territory violated the Indigenous communities' rights to life and prior consultation.	
32	2018 (decision)	Decided	Amparo en revision 307/2016	Mexico Supreme Court of Mexico	Neighbours of the Laguna del Carpintero, in the Municipality of Tampico, Tamaulipas	Challenging the construction of a park that would damage and degrade the environment by damaging a coastal wetland environment by, in particular, cutting down existing mangroves and otherwise interfering with the ecosystems. The plaintiffs argue that the respondents overstepped their authority in approving the project and failed to comply with relevant environmental monitoring requirements. The challenged actions by the respondents also violated the petitioners' fundamental human rights guaranteed under the Mexican Constitution.	Mexican Constitution; domestic and international environmental law (including general principles of environmental law such as the precautionary principle)

Appendix (Continued)

No.	Year (filing /decision)	Status	Case Name	Jurisdiction	Plaintiffs	Argument	Legal Basis
33	2019 (decision)	Decided	Sheikh Asim Farooq v. Pakistan	Pakistan High Court of Lahore	Civil society leaders and NGO members	Arguing that proper implementation of various domestic environmental statutes is necessary as a result of rapidly decreasing forest coverage in Pakistan. The plaintiffs further argue that trees in forests and other natural resources are covered by the public trust doctrine, which means that the government should conserve forests for public use instead of allowing them to be used for commercial or private purposes. The government's inaction on this matter is evidenced by its failure to protect existing trees or to plant new trees, despite the mandate under the Trees Act. The plaintiffs also argue that the government has failed to implement its own climate change policies. Finally, the plaintiffs allege that the government has failed to satisfy its obligations under law and policy to preserve, maintain, and grow forest coverage in Pakistan and in Punjab specifically.	Pakistani Constitution; domestic environmental and climate law; general principles of environmental law
34	2019 (initial court decision)	Decided	Case No. 1149-19-JP/ 20	Ecuador Provincial Court of Justice of Imbabura (2019, decision) Constitutional Court of Ecuador (2021, decision)	GAD Municipal of Santa Ana de Cotacachi		Ecuadorian Constitution; domestic forestry law; environmental law

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Appendix (Continued)

No.	Year (filing /decision)	Status	Case Name	Jurisdiction	Plaintiffs	Argument	Legal Basis
35	2019 (decision)	Decided	Flórez-Estrada v. Ministry of Agriculture and Livestock	Costa Rica Supreme Court of Justice, Constitutional Chamber	Environmental attorney	Seeking the prohibition of the use of neonicotinoids – a component of pesticides – in agriculture because of the harm they impose on the domestic bee population, which has broader impacts for biodiversity and the health of the environment.	Costa Rican Constitution; environmental law
36	2019 (filed)	Decided (2021)	Federation for the Conservation of the Environment v. Ministry of Environment & Energy	Costa Rica Supreme Court of Justice, Constitutional Chamber	NGO	Challenging the government's failure to redress mercury contamination from illegal gold mining in the water and environment of the northern part of the country and its environmental consequences, including on biodiversity, in violation of international law and the constitutional right to a healthy environment.	
37	2020 (decision)	Decided	In re Ordinance O14-2018-MPSCH [Expediente 00012-2019-131/TC]	Peru Constitutional Tribunal of Peru	Group of pro-mining citizens	Challenging an ordinance – intended to protect sources of freshwater within the municipal jurisdiction – as unconstitutional because it usurps regulatory authority from other parts of the government. The ordinance will prevent companies that have mining operations in the area or which plan to mine from conducting such activities, even though they have the necessary titles and permits.	Peruvian Constitution; municipal law; law of decentralization; Water Resources Act
38	2020 (filed)	Pending	PSB v. Brazil [Amazon Fund case]	<u>Brazil</u> Federal Supreme Court	Four Brazilian political parties	Alleging that the Brazilian federal government has failed to implement the Amazon Fund in violation of Brazilian law and the government's duty to protect the environment (derived from the precautionary principle and the Brazilian Constitution).	Amazon Fund; Brazilian Constitution (in particular Art. 225); precautionary principle

Appendix (Continued)

No.	Year (filing /decision)	Status	Case Name	Jurisdiction	Plaintiffs	Argument	Legal Basis
39	2020 (decision)	Decided	Islamabad Wildlife Management Board v. Metropolitan Corporation Islamabad	<u>Pakistan</u> High Court of Islamabad	Concerned citizens	Arguing that animals have rights and that the Court should act to protect an elephant at a zoo and a bear held in captivity. Also alleging that the killing of stray dogs is being carried out in a prohibitively cruel manner.	Pakistani Constitution; Prevention of Cruelty to Animals Act; Pakistan Penal Code; wildlife regulations
40	2020 (decision)	Decided	In re Parque Isla Salamanca (STC3872- 2020) [No. 08001-22- 13-000-2019-00505- 01]	Colombia Supreme Court of Justice, Civil Cassation Chamber	Citizen of Barranquilla	Challenging the indiscriminate burning of the Salamanca Island Park and its associated harm.	Colombian Constitution; domestic and international environmental law
41	2020 (filed)	Pending	Institute of Amazon Studies v. Brazil	Brazil Federal District Court of Curitiba	Institute of Amazon Studies	Alleging that Brazil's failure to control deforestation in the Amazon and implement appropriate deforestation control policy violates, inter alia, constitutional and human rights.	Brazilian Constitution; international law
42	2021 (decision)	Decided	D.G. Khan Cement Company Ltd v. Government of Punjab	Pakistan Supreme Court of Pakistan	Corporate owner of a cement manufacturing plant	Challenging a government regulation that limited the establishment of new cement plants and the enlargement of existing plants in a particular geographic area, infringing the plaintiff's constitutional rights.	Pakistani Constitution; Punjab Local Government Act; environmental law principles
43	2021 (filed)	Pending	Pollinis v. France	France Administrative Court of Paris	Pollinis; Notre Affaire à Tous	Alleging that the French government has failed to meet its obligations to protect biodiversity, including by failing to change an insufficient pesticide approval process.	Environmental law

Appendix (Continued)

No.	Year (filing /decision)	Status	Case Name	Jurisdiction	Plaintiffs	Argument	Legal Basis
44	2021 (under review)	Pending	In re Protection of the Bees	Colombia Constitutional Court of Colombia	Colombian lawyer	Challenging the Colombian government's failure to take sufficient action to prevent the extinction of bees in Colombia, which has serious consequences for the environment and for humans.	
45	2021 (filed)	Pending	In re Protection of the Andean Condor	Colombia Council of State	Colombian lawyer	Seeking a court order requiring the government to adopt an urgent plan to protect the Colombian Andes condor and prevent the species' extinction.	Domestic law
46	2021	Pending	Center for Food and Adequate Living Rights v. Uganda [EACOP Case]	East Africa East African Court of Justice	Tanzanian NGOs, Ugandan NGOs, Natural Justice	Alleging that the proposed East African Crude Oil Pipeline [EACOP] violates environmental and administrative law – including for its impacts on biodiversity – as well as rights guaranteed under international human rights law.	African Charter on Human and Peoples' Rights; international human rights law; environmental and administrative law
47	2021	Dismissed	Shell v. Border Deep Sea Angling Association	South Africa Grahamstown High Court	Four NGOs	Challenging Shell's plan to conduct seismic testing off South Africa's Wild Coast, which poses a threat of harm to whales and other marine wildlife and their habitat, on the basis that the oil company failed to adequately conduct an environmental impact assessment.	Domestic environmental and administrative law
48	2021	Decided	Sustaining the Wild Coast v. Shell	South Africa High Court of South Africa, Eastern Cape Division	NGOs and community members	0 0 1	South African Constitution; domestic environmental law
49	2021	Pending	Envol Vert v. Casino	France Saint-Etienne Court	Environmental NGOs from France, Colombia and Brazil	Arguing that the Casino Group (supermarket company) must take all necessary measures to exclude beef tied to deforestation and the grabbing of Indigenous territories in its supply chains in Colombia, Brazil and elsewhere, in order to comply with the French law on the duty of vigilance.	French duty of vigilance law; Indigenous rights law