

ScienceDirect



Rights-based approaches to climate decision-making Sébastien Jodoin¹, Annalisa Savaresi² and Margaretha Wewerinke-Singh³



Since the mid-2000s, a growing number of governments, international bodies and experts, and courts have increasingly recognized the importance of a rights-based approach to climate decision-making. By focusing on the impacts of climate change on the rights of individuals, communities, and peoples. a human rights lens emphasizes the human dimensions of climate change, recognizes how forms of systemic discrimination engender and exacerbate vulnerability, and focuses attention on the implications of social and environmental justice for climate governance. Moreover, states and private actors' human rights obligations and responsibilities have specific implications in relation to climate change. State and non-state actors are not only obliged to take effective mitigation and adaptation measures that respect, protect, and fulfil human rights, but they must also ensure that these measures do not in of themselves infringe human rights. Finally, rights-based approaches emphasize the importance of public participation, access to information, and access to justice in the development, implementation, and review of climate decisions. Despite its promise, the transformative potential of rights-based approaches for addressing climate change and delivering climate justice remains unrealized.

Addresses

¹McGill University, Faculty of Law, 3644 Peel St., Montreal, QC H3A 1W9, Canada

² University of Stirling, Division of Law and Philosophy, University of Stirling, Stirling, Scotland FK9 4LA, UK

³ University of Leiden, School of Law, Leiden University, P.O. Box 9500, 2300 RA Leiden, The Netherlands

Corresponding author: Jodoin, Sébastien (sebastien.jodoin-pilon@mcgill.ca)

Current Opinion in Environmental Sustainability 2021, 51/52:xx-yy

This review comes from a themed issue on Climate decision-making

Edited by Diana Reckien, Cathy Vaughan and Rachael Shwom

Received: 17 September 2020; Accepted: 08 June 2021

https://doi.org/10.1016/j.cosust.2021.06.004

1877-3435/© 2021 Elsevier B.V. All rights reserved.

Introduction

In line with a growing international consensus that human rights have a central role to play in addressing environmental problems [1–3], providing access to justice, and fostering inclusive sustainable development [4], human rights concepts and approaches have gained increasing prominence in the field of climate change during the past fifteen years [5,6[•],7,8[•]]. The human rights dimensions of climate governance have been recognized in a series of resolutions, decisions, and reports that have been adopted under the United Nations Framework Convention on Climate Change (UNFCCC) and international and regional human rights systems; in the standards and conditions established through multilateral, bilateral, and non-governmental forms of governance; and in several domestic judicial decisions [6,9,10]. Our review takes stock of the evolving relationship between human rights and climate change law and policy, identifies the key features of a rights-based approach to climate decision-making, and assesses its potential and limitations as a framework for ensuring that the processes and outcomes of climate decisions are inclusive, equitable, and effective.

The relationship between human rights and climate change in international and comparative law

While human rights have long been recognized as relevant to environmental protection and sustainable development [2,4,11,12], rights-based approaches were absent in the debates and decision-making processes of climate governance before the mid-2000s [8°]. The text of the UNFCCC itself does not refer to human rights [13] and the rules and guidance adopted for the implementation of projects pursued under the Clean Development Mechanism (CDM) established by the *Kyoto Protocol* did not include any references to human rights principles or standards [14,15].

As a result of the advocacy efforts of Indigenous Peoples, small island states, and activists, the importance of human rights for understanding and responding to climate change has been increasingly recognized by actors and institutions at the international, regional, transnational, and domestic levels. $[5,6^{\circ},16,17]$. In 2005, Inuit communities in the Arctic filed a petition before the Inter-American Commission of Human Rights that alleged that the contributions of the United States to global warming violated their rights to life, security, health, culture, property, traditional land, subsistence, and housing [18^{••}]. While the petition was dismissed, it framed climate change as a problem affecting the human rights of marginalized communities and requiring that large state emitters be held accountable for their contributions to global warming under international human rights law [19].

The petition was followed by the 2007 Malé Declaration in which small-island states requested that climate change be addressed in the context of the UN human rights system [20]. In turn, the UN Human Rights Council (UNHRC) has made significant contributions to the cross-fertilization of the fields of human rights and climate change [21,22]. In 2008, the UNHRC adopted a resolution that recognized that climate change 'poses an immediate and far-reaching threat to people and communities around the world and has implications for the full enjoyment of human rights' [23]. It has since adopted more resolutions on climate change that have stressed, among other things, the importance of adopting a rights-based approach to climate policy-making, the role of international cooperation for protecting human rights in a changing climate, and the disproportionate impacts of climate change on marginalized groups, such as children, women, and persons with disabilities, in the context of climate action [24]. At the UNHRC's request, the Office of the UN High Commissioner for Human Rights (OHCHR) and other mandate holders have prepared a rich corpus of studies, reports, and statements on various themes relating to climate change and human rights [25].

The treaty bodies established under specific international human rights conventions have also clarified the human rights obligations of states in relation to climate change in their authoritative commentaries on different human rights provisions and their review of state compliance [26]. Likewise, multiple regional human rights bodies have addressed the issue of climate change in the context of their work [27]. In particular, the African Commission on Human and Peoples' Rights has adopted four resolutions on climate change, all of which call for an in-depth study of the impact of climate change on human rights in Africa [28].

Human rights language has also gained increased currency in the climate regime [13]. The *Cancun Agreements*, adopted in 2010, is the first decision under the UNFCCC to refer to human rights and most notably integrates references to the rights of Indigenous Peoples and local communities in a decision on safeguards that should be respected by governments in the context of their efforts to reduce emissions from deforestation and forest degradation (REDD+) [29]. Most importantly, the preamble to the *Paris Agreement* adopted in 2015 acknowledges that 'Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity.' $[30^{\circ\circ}, 31]$.

The role of human rights in multilateral climate governance is further reflected in two key developments. The parties to the *Paris Agreement* established a Local Communities and Indigenous Peoples Platform (LCIPP) to strengthen the climate efforts of local communities and Indigenous Peoples, identify and share best practices for doing so, and enhance their engagement in UNFCCC processes [32]. In 2017, the parties to the UNFCCC adopted a *Gender Action Plan*, which aims to advance understanding of gender-responsive approaches to climate action, promote gender mainstreaming in the development and implementation of climate policies, and to ensure the full, equal, and meaningful participation of women in the UNFCCC process, as well as in national and local climate processes [33].

Beyond the UNFCCC, some of the programmes established by multilateral, bilateral, and non-governmental organizations to support, fund, guide, or certify the development and implementation of climate mitigation activities have, to various extents, incorporated human rights standards in their operational rules and safeguards [9,34]. One of the international agencies facilitating REDD+ activities, the UN-REDD Programme, has adopted a human rights-based approach to its work and elaborated guidelines on the rights of Indigenous Peoples to free, prior, and informed consent in partnership with human rights bodies and multiple stakeholders [35]. Further, some of the standards adopted by climate finance institutions and agreements specifically refer to human rights and have been elected as one of the criteria that states should satisfy to access funding for mitigation and adaptation projects [9,36].

Finally, there has been a proliferation of litigation that emphasizes the importance of human rights for addressing climate change [10°,37°,38]. For example, in Teitiota v New Zealand the UN Human Rights Committee was asked to consider states' human rights obligations to offer protection to climate migrants. While the complaint was unsuccessful, the UN Human Rights Committee did acknowledge that climate impacts in migrants' state of origin can trigger non-refoulement obligations for the states they enter [39]. Two other international human rights-based climate complaints, before the UN Human Rights Committee and the Committee on the Rights of the Child respectively, are still pending [40,41] and three climate change cases have been lodged before the European Court of Human Rights [42-44]. Rights-based climate lawsuits against governments have also been filed in

over two dozen countries. As is discussed in Section 'The key features and potential of a rights-based approach to climate decision-making', several of these cases have resulted in judgements that have clarified the duties of states and corporations to protect human rights against the adverse effects of climate change and obliged them to implement effective or more ambitious measures to do so $[37^{\circ}, 45^{\circ}, 46, 47^{\circ}]$.

The key features and potential of a rightsbased approach to climate decision-making

Together, these developments in international and comparative law suggest the adoption of a rights-based approach for understanding climate change and shaping the development and implementation of climate decisions and actions. To begin with, such an approach emphasizes the human dimensions of climate change by focusing on the multifaceted impacts of climate change for the lives, safety, health, and well-being of populations all over the world [48–52]. As is outlined in Table 1, this entails characterizing the key findings of climate science regarding the effects of slow on-set changes to the climatic system (such as gradual increases

Table 1 Examples of the human rights impacts of climate change	
Right to food	Climate change is progressively threatening the supply and accessibility of food due to the destruction of crop yields and reductions in the availability of rainfall and arable land [56].
Right to water	Climate change is undermining access to water by triggering increases in droughts and gradually reducing the availability of ground water [57].
Right to work	Climate change is resulting in increased unemployment through the destruction of infrastructures and access to natural resources that are necessary for certain economic activities [58].
Right to housing	Sea level rises, floods, and storm surges fuelled by climate change are destroying homes and critical infrastructures in coastal settlements [59].
Right to freedom of movement	Climate change is triggering the displacement of individuals and communities due to the increased incidence of severe weather events and slow-onset environmental changes [60].
Right to self- determination	Climate change is hampering the right of peoples to freely dispose of their natural resources and threatens to render the entire land territories of some states uninhabitable [61].

in temperatures or the expansion of vector-borne and infectious diseases) and the increased frequency and severity of severe weather events (such as heat waves or cyclones) in terms of their effects for the realization of civil and political rights; economic, social, and cultural rights; and collective rights [5,45°,53]. Drawing on this evidence, the Special Rapporteur on Human Rights and the Environment has most notably concluded that a 'safe climate' to the enjoyment of a broad range of human rights recognized under international law [45°].

A rights-based approach recognizes that certain communities and segments of the population are affected by climate change, most notably women [62,63], children [64–66], the elderly [67], Indigenous Peoples [18^{••},68], persons with disabilities [69], the poor [70], and displaced persons and refugees [71,72]. Numerous studies and reports of the human rights impacts of climate change examine how intersecting forms of oppression and systemic discrimination engender and exacerbate vulnerability to climate impacts [45^{••},53]. In doing so, a human rights perspective resonates with the growing body of scholarship that posits that existing structures of marginalization undermine the capacity of vulnerable groups to cope with, and adapt to, climate impacts [73,74]. As such, a right-based approach emphasizes the distributive consequences of climate change and focuses attention on its implications for the pursuit of social and environmental justice [49,75,76].

In addition, a rights-based approach emphasizes that states and private actors have significant human rights obligations and responsibilities in the context of climate change [5,45^{••}]. Several human rights bodies and experts have concluded that states are obliged to take measures to prevent infringements of human rights caused by climate change, including by reducing their GHG emissions, implementing adaptation initiatives to enhance climate resilience, and cooperating with other states to support global efforts to combat climate change [45^{••},77]. At the domestic level, in cases such as *Leghari* v. Federation of Pakistan, Salamanca Mancera v. Presidencia de la República de Colombia, Urgenda et al. v. the Netherlands, and Neubauer et al. v. Germany, courts have specifically concluded that the inadequacy of a state's efforts to combat climate change constitutes a violation of their human rights obligations. Accordingly, the courts in these cases ordered governments to take specific measures to address the adverse effects of climate change, including by establishing a Climate Change Commission (Leghari) [78], implementing measures to reduce deforestation (Salamanca Mancera) [79], or by adopting a new target for reducing emissions in line with the recommendations of climate science (Urgenda, *Neubauer*) [80^{••},46]. These cases demonstrate that inadequate climate action may be subject to judicial review by courts and can trigger legal consequences, which include an obligation to make reparation for harm caused, in accordance with the general law of State responsibility [51]. Moreover, rights-based climate litigation increasingly targets also corporate actors, who are called upon to reduce emissions in line with the recommendations of climate science on the basis of human rights obligations [81]. A prominent example is the landmark 'Carbon Majors Inquiry' carried out by the Philippines Human Rights Commission from 2015-2019. Further, in May 2021 a Dutch Court marked a milestone in the history of climate litigation worldwide by ordering Royal Dutch Shell to reduce its CO2 emissions of 45% by 2030, compared to 2019 levels $[47^{\bullet\bullet}]$.

Finally, a rights-based approach seeks to ensure that climate policies and programmes abide by all relevant international and domestic obligations and standards and do not in of themselves infringe on the rights of affected communities [34]. Best practices here include the use of human rights impact assessments (HRIA) and other due diligence assessments, the creation of safeguards and other mechanisms that can prevent tensions and maximize synergies between fundamental rights and climate actions, and the adoption of a rights-based approach for developing, implementing, monitoring, and evaluation climate policies and programmes [26,35,36,87,88]. In doing so, a rights-based approach emphasizes the importance of public participation, access to information, and access to justice to ensure that climate governance processes are fair, transparent, and inclusive [89,90]. This requires measures that strengthen the capacity of citizens and communities to participate in climate decision-making that concerns them [73,86,83-85] and provide them with access to judicial or administrative proceedings and effective remedies when they suffer harm from climate action and inaction [89,90]. Moreover, different human rights instruments require that States fully and effectively ensure the meaningful participation of certain groups that have been historically disenfranchised in decisionmaking processes, including Indigenous Peoples, persons with disabilities, minorities, women, and children [36,62,64,67,69]. By way of example, the LCIPP has developed a rights-based approach to the use of traditional knowledge in scientific assessment and documentation processes by agreeing to facilitate the integration of diverse knowledge systems, practices and innovations in designing and implementing international and national actions, programmes and policies in a manner that respects and promotes the rights and interests of local communities and indigenous peoples. [91]. This emphasis on inclusion is also supported by social science literature highlighting the benefits of respecting and valuing the knowledge, perspective, and empowerment of Indigenous Peoples, local communities, and women in initiatives to decarbonize societies or enhance their climate resilience [88,92–94].

The unrealized potential of rights-based approaches in the context of climate governance

Despite its promise, the full and effective implementation of a rights-based approach in the field of climate governance has not been without its challenges [95,96]. To begin with, while the universality of human rights is often held out as one of its strengths [4], the interpretation, application, and impacts of human rights norms vary greatly from context to context due to the mediating influence of underlying legal, cultural, and social practices as well as political and economic conditions [97,98]. The very concept of human rights has been criticized by some countries and scholars as reflecting western values and constituting an imperial project [99-101]. For instance, the human rights norms embedded in the safeguards for REDD+ have in some cases been resisted, inadequately implemented or otherwise transformed by domestic institutions and policy-makers [36,102]. Likewise, the resonance of a human rights framing of climate change has been found to differ significantly based on whether it is aligned or not with the legal and cultural norms internalized by different actors [19].

In addition, there are obstacles to using human rights litigation as a way of addressing climate change $[37^{\circ}, 103]$. In general, the viability of public interest litigation reliant on human rights arguments depends on the requirements for obtaining legal standing (whether a group or an individual can bring a case to court) and the substantive rules that make a lawsuit more or less likely to succeed on the merits [90, 104, 105]. While some plaintiffs have succeeded in bringing rights-based climate cases to court $[10^{\circ}]$, others have not managed to persuade judges to hear their complaints [90]. More broadly, the promise of legal mobilization strategies for climate justice is constrained by the availability of resources and support structures for the pursuit of public interest litigation, especially among marginalized communities [106].

Finally, while attention accorded to human rights in the context of the multilateral climate regime [13], there is a chasm between the invocation of rights and their actual influence on the substance and implementation of Parties' decisions [96,107-109]. Many scholars have criticized the design and implementation of REDD+ and CDM programmes and projects for excluding Indigenous Peoples and local communities and encroaching on their land and resource rights [14,110–113]. Debates over the adoption of a rights-based approach to climate action have continued in relation to efforts to operationalize different components of the *Paris Agreement* [82,114]. This debate has been particularly lively in relation to the socalled Sustainable Development Mechanism (SDM), which is meant to enable state parties to cooperate in the mitigation of greenhouse gas emissions, while supporting sustainable development. While experiences with

the CDM and REDD+ indicate that a rights-based approach should be developed, negotiations on the operationalisation of the SDM remain ongoing and mired in disagreement [82[•]]. Loss and damage is another area of the multilateral climate negotiations that would significantly benefit from greater alignment with human rights norms and principles, but where human rights have been notoriously absent [50]. More broadly, reviews of the national climate laws and policies show that human rights norms continue to play a limited role in domestic climate governance [115]. On-going resistance to applying human rights to different facets of climate governance remind us that the recognition and implementation of human rights remains a contested political project around the world [116]. In particular, to the extent that human rights seek to shape the conduct of governments, corporations, and NGOs, they represent a challenge to the power structures that have generated the climate crisis and have the potential to give rise to distributive conflicts over the measures needed to decarbonize societies and enhance their climate resilience.

Whenever they are adopted and implemented, measures aimed to deliver adaptation and/or mitigation typically create tensions between competing societal objectives and interests [117]. And while in principle there is no incompatibility between climate change response measures and human rights protection, in practice policy conflicts between the two may and do emerge. For example, measures constraining access to, and the use of, natural resources — such as land, water and forests affect the enjoyment of rights — such as those to culture, respect for family life, access to safe drinking water and sanitation, and indigenous peoples' self-determination. Human rights complaints opposing climate change adaptation and/or mitigation projects, policies and legislation are symptomatic of the complex justice questions associated with sharing the burdens of the transition away from fossil fuels and of coping with a changed climate [118].

Conclusions

A rights-based approach offers a compelling normative framework and methodology for ensuring that climate decisions are inclusive, equitable, and effective and ultimately result in a just transition towards a carbon neutral world. The UNHRC has affirmed that 'human rights obligations and commitments have the potential to inform and strengthen international and national policymaking in the area of climate change, promoting policy coherence, legitimacy and sustainable outcomes' [119]. Human rights litigation may bolster climate decisionmaking and accountability by providing the means to subject the decisions of governments and corporations to judicial scrutiny and by giving citizens access to justice to challenge climate action or inaction that contradicts their fundamental rights [10°,37°,46,47°°,90]. Not only are rights-based approaches grounded in the international and domestic legal obligations, their core features are supported by an extensive social science literature on the value of equity, fairness, and inclusion in climate governance and are, in many respects, aligned with the criteria that have been identified by scholars as key for 'good' environmental decisions [120].

In sum, the full and effective implementation of human rights in the field of climate governance can play a key role in ensuring that governments and corporations take steps to address the climate crisis and its consequences, and that they do so in a manner that ensures the participation of civil society and addresses inequalities. In many ways, the growing wave of domestic rights-based climate cases and judgements remind us of the fundamental importance of protecting human life, dignity and culture, safeguarding procedural and substantive equality, and protecting individuals from the arbitrary and unjust decisions of governments and corporations.

The transformative potential of rights-based approaches for climate decision-making remains far from realized, however. There are important gaps that need to be addressed to ensure that human rights are fully and effectively implemented in the processes and outcomes of climate governance at multiple levels [121,122]. In particular, there are several aspects of climate governance and issues of climate justice where the role and relevance of human rights require further clarification and innovation, including the recognition and protection of the rights of future generations [123], the human rights responsibilities of businesses in relation to climate change [124], and the contribution of human rights in efforts to enhance the climate resilience of populations [71,125,126]. In doing so, it is vital that policy-makers, activists, and scholars adopt practices that empower affected communities, respect their agency and knowledge, and disrupt, rather than reproduce, structures of injustice and discrimination within and across societies [19,127-130].

Conflict of interest statement

Nothing declared.

References and recommended reading

Papers of particular interest, published within the period of review, have been highlighted as:

- of special interest
- •• of outstanding interest
- 1. Boer B: *Environmental Law Dimensions of Human Rights*. Oxford University Press; 2015.
- 2. Picolotti R, Taillant JD: *Linking Human Rights and the Environment*. University of Arizona Press; 2003.
- 3. Anton D, Shelton D: *Environmental Protection and Human Rights*. Cambridge University Press; 2011.
- Arts K: Inclusive sustainable development: a human rights perspective. Curr Opin Environ Sustain 2017, 24:58-62.

- 5. Atapattu S: *Human Rights Approaches to Climate Change: Challenges and Opportunities.* Routledge; 2016.
- Duyck S, Jodoin S, Johl A: *The Routledge Handbook of Human Rights and Climate Governance*. Routledge; 2018.

This edited collection analyses the challenges and opportunities for integrating human rights in a wide range of areas and forms of global climate governance, with contributions from both scholars and practitioners.

- 7. Lewis B: Environmental Human Rights and Climate Change: Current Status and Future Prospects. Springer; 2018.
- Knox JH: Climate change and human rights law. Va J Int Law
 2009, 50:163-218.

This article by future UNSR Knox provides a basis for a better understanding of how human rights law applies to climate change. It establishes that climate change already interferes with the human rights of vulnerable communities and is an enormous threat to human rights everywhere. It finds that human rights law imposes duties on states to respond to climate change regardless of whether they can be held responsible for 'causing' it and that it also con-strains states' responses.

- 9. Olawuyi DS: *Human Rights-Based Approach to Carbon Finance*. Cambridge University Press; 2016.
- 10. Peel J, Osofsky HM: A rights turn in climate change litigation?

• Transnatl Environ Law 2018, 7:37-67. This article considers recent developments in climate litigation and the increasing trend for petitioners to employ rights claims in climate change lawsuits, as well as a growing receptivity of courts to this framing. It argues that this 'rights turn' could serve as a model or inspiration for rights-based litigation in other jurisdictions.

- 11. Boyle A, Anderson MR: *Human Rights Approaches to Environmental Protection*. Oxford University Press; 1996.
- 12. Knox JH, Pejan R: *The Human Right to a Healthy Environment*. Cambridge University Press; 2018.
- 13. Rajamani L: The increasing currency and relevance of rightsbased perspectives in the international negotiations on climate change. J Environ Law 2010, 22:391-429.
- Schade J, Obergassel W: Human rights and the clean development mechanism. Cambridge Rev Int Aff 2014, 27:717-735.
- 15. Roht-Arriaza N: Human rights in the climate change regime. J Hum Rights Environ 2010, 1:211-235.
- 16. Schapper A, Lederer M: Introduction: human rights and climate change: mapping institutional inter-linkages. *Cambridge Rev Int Aff* 2014, **27**:666-679.
- 17. Wallbott L: Indigenous peoples in UN REDD + negotiations : "importing power" and lobbying for rights through discursive interplay management. Ecol Soc 2014, 19:21.
- 18. Watt-Cloutier S: 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.

This document presents the first human rights-based climate complaint, and the first climate case brought before a human rights body. It remains the only climate complaint brought before a regional human rights body.

- Jodoin S, Snow S, Corobow A: Realizing the right to be cold? Framing processes and outcomes associated with the Inuit petition on human rights and global warming. *Law Soc Rev* 2020, 54:168-200.
- 20. States SID: **Small island developing states**. *Male' Declaration on the Human Dimension of Global Climate Change*. 2007.
- Kirchmeier F, Lador Y: From Copenhagen to Paris at the UN Human Rights Council. When climate change became a human rights issue. In *The Routledge Handbook of Human Rights and Climate Governance*. Edited by Duyck S, Jodoin S, Johl A. Routledge; 2018:145-164.
- 22. Cameron E, Limon M: Restoring the climate by realizing rights: the role of the international human rights system. *Rev Eur Community Int Environ Law* 2012, **21**:204-219.
- 23. United Nations Human Rights Council: Resolution 7/23. Human Rights and Climate Change. . Un Doc. A/HRC/RES/7/23 2008.

- 24. Office of the United Nations High Commissioner for Human Rights: Human Rights Council Resolutions on Human Rights and Climate Change. 2020.
- 25. Office of the United Nations High Commissioner for Human Rights: OHCHR and Climate Change. 2020.
- 26. United Nations Human Rights Council (UNHRC): Report of the Independent Expert on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment, John H. Knox: Mapping Report. 2013.
- Ataputtu S: Climate change under regional human rights systems. In Routledge Handbook of Human Rights and Climate Governance. Edited by Duyck S, Jodoin S, Johl A. Routledge; 2018:128-144.
- Jegede AO: Climate change in the work of the African commission on human and peoples' rights. Speculum Juris 2017, 31:135-150.
- UNFCCC COP: Report of the Conference of the Parties on its Sixteenth Session, Held in Cancun from 29 November to 10 December 2010. 2011.
- **30.** UNFCCC COP: Paris Agreement, Report of the Conference of the • Parties on its Twenty-First Session, Held in Paris from

30 November to 13 December 2015. UNFCCC/CP; 2015:1-32. The Paris Agreement is a legally binding treaty adopted under the United Nations Framework Convention on Climate Change in December 2015. Besides mitigation, the Paris Agreement deals with adaptation, finance, technology transfer, capacity building and loss and damage. The Paris Agreement is also the first multilateral climate agreement to include an explicit reference to human rights.

- 31. Boyle A: Climate change, the Paris Agreement and human rights. Int Comp Law Q 2018, 67:759-777.
- Belfer E, Ford JD, Maillet M, Araos M, Flynn M: Pursuing an indigenous platform: exploring opportunities and constraints for indigenous participation in the UNFCCC. *Glob Environ Polit* 2019, 19:12-33.
- **33.** UN Framework Convention on Climate Change: Enhanced Lima Work Programme on Gender and its Gender Action Plan. 2019:10:. 21501.
- Roht-Arriaza N: "First, do no harm": human rights and efforts to combat climate change. Georg J Int Comp Law 2010, 38:593-612.
- **35.** Savaresi A: **REDD + and human rights: addressing synergies between international regimes.** *Ecol Soc* 2013, **18**:1-9.
- **36.** Jodoin S: Forest Preservation in a Changing Climate: REDD+ and Indigenous and Community Rights in Indonesia and Tanzania. Cambridge University Press; 2017.
- 37. Savaresi A, Auz J: Climate change litigation and human rights:

• pushing the boundaries. *Clim Law* 2019, 9:244-262. This article takes stock of human rights arguments made in climate change litigation to gauge what they reveal about the evolving relationship between human rights and climate change law and about possible future developments.

- de la Rosa Jaimes V: Climate change and human rights litigation in Europe and the Americas. Seattle J Environ Law 2016, 5:165-196.
- Marshall N: Climate migration and loss: exploring the conceptual borders of citizenship, sovereign authority, and the deterritorialized state. *Development* 2020, 63:20-26.
- 40. Climate Threatened Torres Strait Islanders Bring Human Rights Claim Against Australia. ClientEarth; 2019.
- 41. 16 Children, Including Greta Thunberg, File Landmark Complaint to the United Nations Committee on the Rights of the ChildNo Title. Unicef; 2019.
- 42. People's Climate Case: Briefing Note: People's Climate Case Appeal to the European Court of Justice Background. 2019.
- Duarte Agostinho and Others v Portugal and 32 other States (Application no 39371/20) was given priority and communicated to the respondent States on 13 November 2020. For more

information, see https://youth4climatejustice.org/ (Accessed 10 April 2021).

- 44. Verein Klimaseniorinnen v Switzerland (Application no. 53600/20) was given priority and communicated to the respondent States on 6 April 2021. For more information see https://klimaseniorinnen.ch (Accessed 10 April 2021). Case citation information can be found here https://klimaklage.fridaysforfuture.at/ (Accessed 20 May 2021).
- 45. United Nations General Assembly: Human Rights Obligations
- Relating to the Enjoyment of a Safe, Clean, Healthy and Šustainable Environment. 2019.

This report released by the Special Rapporteur provides a comprehensive analysis of the key human rights instruments, principles, and obligations relating to the preservation of a healthy environment under international law.

46. Neubauer, et al. v. Germany. Federal Constitutional Court; 2021.

47. Milieudefensie et al. v Royal Dutch Shell plc. Hague District Court;
2019:19-379:. C/09/571932/HA ZA.

This landmark judgement represents the first time that a domestic court has recognised that corporate actors have obligations which require them to address the global climate crisis as a matter of human rights law.

- Ferreira PG: 'Common but differentiated responsibilities' in the national courts: lessons from Urgenda v. The Netherlands. *Transnatl Environ Law* 2016, 5:329-351.
- Schapper A: Climate justice and human rights. Int Relat 2018, 32:275-295.
- Toussaint P, Martínez Blanco A: A human rights-based approach to loss and damage under the climate change regime. Clim Policy 2019, 6:1-15.
- 51. Wewerinke-Singh M: State Responsibility, Climate Change and Human Rights Under International Law. Hart; 2019.
- 52. Adelman S, Lewis B: Rights-based approaches to climate change. *Transnatl Environ Law* 2018, **7**:9-15.
- 53. OHCHR: Understanding Human Rights and Climate Change, Submission of the Office of the High Commissioner for Human Rights to the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change. 2015.
- Masson-Delmotte V, Zhai P, Pörtner H-O, Roberts D, Skea J, Shukla PR, Pirani A, Moufourna-Okia W, Péan C, Pidcock R et al.: Global Warming of 1.5°C: An IPCC Special Report. 2018.
- 55. Watts N, Amann M, Arnell N, Ayeb-Karlsson S, Belesova K, Berry H, Bouley T, Boykoff M, Byass P, Cai W et al.: The 2018 report of the Lancet Countdown on health and climate change: shaping the health of nations for centuries to come. Lancet 2018, 392:2479-2514.
- 56. Saab A: Human Rights, Climate Change, and the Right to Food. 2019.
- **57.** Office of the United Nations High Commissioner for Human Rights: *Climate Change and the Human Rights to Water and Sanitation.* 2009.
- Harsdorff M, Lieuw-Kie-Song M, Tsukamoto M: Towards an ILO Approach to Climate Adaptation. 2011.
- **59.** United Nations: Report of the Special Rapporteur on Adequate Housing as a Component of the Right to an Adequate Standard of Living, and on the Right to Non-Discrimination in this Context. 2009.
- 60. Beyani C: Climate Change and Internal Discplacement. 2011.
- Frere T, Mulalap CY, Tanielu T: Climate change and challenges
 to self-determination: case studies from French Polynesia and the Republic of Kiribati. Yale Law J 2020, 129:648-673.

This article analyses the relationship between climate change and the right of self-determination. It unpacks this relationship through two case studies: one centered on French Polynesia, where the impacts of climate change undermine people's right to freely dispose of their natural resources, and one examining the Republic of Kiribati, which faces a threat to its status as a state due to sea-level rise and other adverse effects of climate change. The authors warn against defeatist narratives regarding the future of low-lying atoll states that could become a self-fulfilling prophecy if left unchecked.

- Bendlin L: Women's human rights in a changing climate: highlighting the distributive effects of climate policies. Cambridge Rev Int Aff 2014, 27:680-698.
- 63. Pearse R: Gender and climate change. Wiley Interdiscip Rev Clim Change 2017, 8:1-16.
- Arts K: Children's rights and climate change. In Children's Rights in International Sustainable Development Law. Edited by Fenton-Glynn C. Cambridge University Press; 2019:216-235.
- Gibbons ED: Climate change, children's rights, and the pursuit of intergenerational climate justice. *Heal Hum Rights J* 2014, 16:1-18.
- Pegram J: Overlooked and undermined: child rights and climate change. In Routledge Handbook of Human Rights and Climate Governance. Edited by Duyck S, Jodoin S, Johl A. Routledge; 2018:259-265.
- Bähr CC, Brunner U, Casper K, Lustig SH: KlimaSeniorinnen: lessons from the Swiss senior women's case for future climate litigation. J Hum Rights Environ 2018, 9:194-221.
- Lewis B: Climate change and human rights: perspectives of environmental and indigenous rights. J Australas Law Teach Assoc 2008, 1:153-161.
- Jodoin S, Lofts K, Ananthamoorthy N: A disability rights approach to climate governance. Ecol Law Q 2020, 47.
- Hallegatte S, Rozenberg J: Climate change through a poverty lens. Nat Clim Change 2017, 7:250.
- Lewis B, Maguire R: A human rights-based approach to disaster displacement in the Asia-Pacific. Asian J Int Law 2016, 6:326-352.
- Showler P: Human Rights and Environmental Disruptions Eco-Refugees. 2010.
- Ensor J, Park SE, Hoddy ET, Ratner BD: A rights-based perspective on adaptive capacity. *Glob Environ Change* 2015, 31:38-49.
- 74. Thomas K, Hardy RD, Lazrus H, Mendez M, Orlove B, Rivera-Collazo I, Roberts JT, Rockman M, Warner BP, Winthrop R: Explaining differential vulnerability to climate change: a social science review. Wiley Interdiscip Rev Clim Change 2019, 10:e565.
- Levy BS, Patz JA: Climate change, human rights, and social justice. Ann Glob Health 2015, 81:310-322.
- Caney S: Human rights and moral thresholds. In Human Rights and Climate Change. Edited by Humphreys S. Cambridge University Press; 2010:69-90.
- 77. United Nations Human Rights Council (UNHRC): Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment Note. 2016.
- 78. Lahore High Court: Ashgar Leghari c Federation of Pakistan, et al.. 2015.
- 79. Corte Suprema de Justicia R de C: Demanda Generaciones Futuras v. Minambiente. 2018.

80. Supreme Court of the Netherlands CD: Urgenda Foundation v. State of the Netherlands. 2019.

This landmark judgement represents the first time for a domestic court to recognise that states are obliged to do their 'fair share' to address the global climate crisis as a matter of human rights law. Specifically, the Supreme Court found that articles 2 (right to life) and 8 (right to family life) of the European Convention on Human Rights oblige the state to take suitable measures if a real and immediate risk to people's lives or welfare exists and the state is aware of that risk.

- 81. Macchi Chiara: The climate change dimension of business and human rights: the gradual consolidation of a concept of "climate due diligence". Bus Hum Rights J 2021, 6:93.
- 82. Duyck S, Lennon E, Obergassel W, Savaresi A, Duyck S, Lennon E, Obergassel W, Savaresi A: Human rights and the Paris agreement's implementation guidelines: opportunities to develop a rights-based approach. *Carbon Clim Law Rev* 2018, 12:191-202.

This article considers the integration of human rights in climate governance and identifies opportunities to encapsulate human rights considerations in the Paris Agreement rulebook, and to promote climate action that aligns with Parties' human rights obligations.

- 83. Jodoin S: Can rights-based approaches enhance levels of legitimacy and cooperation in conservation? A relational account. *Hum Rights Rev* 2014, **15**:283-303.
- 84. Greiber T, Janki M, Orellana M, Savaresi A, Shelton D: Conservation with Justice: A Rights-Based Approach, IUCN Environmental Law and Policy Paper No. 71. IUCN; 2009.
- UN: Right to a Healthy Environment: Good Practices 2019, vol 16405-421.
- Jodoin S, Duyck S, Lofts K: Public participation and climate governance: an introduction. *Rev Eur Comp Int Environ Law* 2015, 24:117-122.
- 87. Chu E, Anguelovski I, Carmin JA: Inclusive approaches to urban climate adaptation planning and implementation in the Global South. *Clim Policy* 2016, **16**:372-392.
- Cochran P, Huntington OH, Pungowiyi C, Tom S, lii FSC, Huntington HP, Maynard NG, Trainor SF: Indigenous frameworks for observing and responding to climate change in Alaska. *Clim Change* 2013, 120:49-59.
- 89. Wewerinke-Singh M: Remedies for human rights violations caused by climate change. *Clim Law* 2019, 9:224-243.
- Setzer J, Vanhala LC: Climate change litigation: a review of research on courts and litigants in climate governance. Wiley Interdiscip Rev Clim Change 2019, 10:e580.
- 91. Savaresi A: Traditional knowledge and climate change: new legal frontier? J Hum Rights Environ 2018, 9:32-50.
- 92. Pelletier J, Gélinas N, Skutsch M: The place of community forest management in the REDD+ landscape. Forests 2016, 7:1-24.
- **93.** Kronsell A: **Gender and transition in climate governance**. *Environ Innov Soc Transit* 2013, **7**:1-15.
- 94. Figueiredo P, Perkins PE: Women and water management in times of climate change: participatory and inclusive processes. J Clean Prod 2013, 60:188-194.
- **95.** Lewis B: *Environmental Human Rights and Climate Change*. Springer Nature Singapore Pte Ltd.; 2018.
- 96. Adelman S: Human rights in the Paris agreement: too little, too late? Transnatl Environ Law 2018, 7:17-36.
- **97.** Merry SE: Human Rights and Gender Violence. Translating International Law into Local Justice. University of Chicago Press; 2006.
- Risse T, Ropp SC: Introduction and overview. In *The Persistent Power of Human Rights. From Commitment to Compliance.* Edited by Risse T, Ropp SC, Sikkink K. Cambridge University Press; 2013:3-25.
- 99. Binder Guyora: Cultural relativism and cultural imperialism in human rights law. Buff Hum Rts Law Rev 1999, 5:211.
- 100. Renteln Alison Dundes: International Human Rights: Universalism versus Relativism. Quid Pro Books; 2013.
- 101. Kotzé Louis J: Human rights and the environment in the Anthropocene. Anthropocene Rev 2014, 1:252.
- 102. McDermott CL, Ituarte-Lima C: Safeguarding what and for whom? The role of institutional fit in shaping REDD+ in Mexico. *Ecol Soc* 2016, 21.
- 103. Setzer J, Benjamin L: Climate litigation in the Global South: constraints and innovations. Transnatl Environ Law 2020, 9:77-101.
- 104. Vanhala L: Shaping the structure of legal opportunities: environmental NGOs bringing international environmental procedural rights back home. Law Policy 2018, 40:110-127.
- 105. Vanhala L, Hilson C: Climate change litigation: symposium introduction. *Law Policy* 2013, 35:141-149.

- 106. Marshall A-M, Sterett S: Legal mobilization and climate change: the role of law in wicked problems. Oñati Socio Leg Ser 2019, 3:267-274.
- 107. Beck G, Ditzel C, Gantr S, Perov O: Mind the gap: the discrepancy between the normative debate and actual use of human rights language in international climate negotiations. *Cons J Sustain Dev* 2015, 14:25-45.
- 108. Wallbott L, Schapper A: Negotiating by own standards? The use and validity of human rights norms in UN climate negotiations. Int Environ Agreements Polit Law Econ 2017, 17:209-228.
- 109. Savaresi A: Climate change and human rights fragmentation, interplay, and institutional linkages. In The Routledge Handbook of Human Rights and Climate Governance. Edited by Duyck S, Jodoin S, Johl A. Routledge; 2018:31-42.
- 110. Horner B: A human rights-based approach to climate change: lessons from developments of the CDM and REDD +. New Zeal J Environ Law 2015, 19:79-112.
- 111. Dehm J: Indigenous peoples and REDD+ safeguards: rights as resistance or as disciplinary inclusion in the green economy? *J Hum Rights Environ* 2016, **7**:170-217.
- 112. Tehan M, Godden L, Young MA, Gover K: The Impact of Climate Change Mitigation on Indigenous and Forest Communities International, National and Local Law Perspectives on REDD+. Cambridge University Press; 2017.
- 113. Obergassel W, Peterson L, Mersmann F, Schade J, Mayrhofer JA, Hofbauer M: Human rights and the clean development mechanism: lessons learned from three case studies. *J Hum Rights Environ* 2017, 8:51-57.
- 114. Savaresi A, Scott J: Implementing the Paris agreement: lessons

•• from the global human rights regime. *Clim Law* 2019, 9:159-164. This special issue looks at the use of instruments, procedures, and processes developed for human rights governance at the international, regional, and national levels, as a way of supporting climate governance. The aim is to assess pathways to implementing the Paris Agreement drawing on lessons from, and using tools developed in the context of, human rights governance.

- 115. Jodoin S, Faucher R, Lofts K: Look before you jump: assessing the potential influence of the human rights bandwagon on domestic climate policy. In The Routledge Handbook of Human Rights and Climate Governance. Edited by Duyck S, Jodoin S, Johl A. Routledge; 2018:167-182.
- 116. Risse Thomas, Ropp Stephen C, Sikkink Kathryn: In *The Persistent Power of Human Rights. From Commitment to Compliance.* Edited by Risse oa, Ropp Stephen CehnC, Sikkink trn. Cambridge, UK: Cambridge University Press; 2013.
- 117. a. Pedersen Ole W: The Janus-head of human rights and climate change: adaptation and mitigation. Nord J Int Law 2011, 80:403;

Peeters Marjan, Nóbrega Sandra: Climate change-related Aarhus conflicts: how successful are procedural rights in EU climate law? *RECIEL* 2014, 23:354-366.

- 118. Business & Human Rights Resource Centre: Renewable Energy & Human Rights Benchmark https://www.business-humanrights. org/en/from-us/briefings/ renewable-energy-human-rights-benchmark/ (Accessed 16 December 2020).
- 119. United Nations Human Rights Council: Resolution 18/22. Human Rights and Climate Change. 2011.
- 120. Dietz T: What is a good decision? Criteria for environmental decision making. *Hum Ecol Rev* 2003, **10**:33-39.
- 121. Davies K, Adelman S, Grear A, Iorns Magallanes C, Kerns T, Rajan SR: The declaration on human rights and climate change: a new legal tool for global policy change. *J Hum Rights Environ* 2017, 8:217-253.
- 122. The declaration. Peoples's Summit Clim Rights Hum Surviv 2019.
- 123. Lewis B: The rights of future generations within the post-Paris climate regime. *Transnatl Environ Law* 2018, **7**:69-87.

- 124. Ganguly G, Setzer J, Heyvaert V: If at first you don't succeed: suing corporations for climate change. Oxf J Leg Stud 2018, 38:841-868.
- 125. Carmalt J: Prioritising health: a human rights analysis of disaster, vulnerability and urbanisation in New Orleans and Port-au-Prince. Health Hum Rights 2014, 16:41-53.
- 126. Christoplos I, McGinn C: Climate change adaptation from a human rights perspective: civil society experiences in Cambodia. Forum Dev Stud 2016, 43:437-461.
- 127. Thew H: Youth participation and agency in the United Nations Framework Convention on Climate Change. Int Environ Agreements Polit Law Econ 2018, 18:369-389.
- 128. Few R, Brown K, Tompkins EL: Public participation and climate change adaptation: avoiding the illusion of inclusion. *Clim Policy* 2007, **7**:46-59.
- 129. Grear A: Towards 'climate justice'? A critical reflection on legal subjectivity and climate in justice: warning signals, patterned hierarchies, future directions for future law and policy. *J Hum Rights Environ* 2014, **5**:103-133.
- 130. Claeys P, Delgado Pugley D: Peasant and indigenous transnational social movements engaging with climate justice. Can J Dev Stud 2017, 38:325-340.