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Symposium

Environmental Health: Towards Synthesis in Global Law and Governance

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Abstract

International law and global governance regimes for environmental health challenges have been slow to reflect the intertwined relationship between the environment and human health. Historical legacies have caused artificial fragmentation between the two that has resulted in distinct fields of international law and institutions for the environment and health. However, new global paradigms for thinking about environmental health have emerged to foster synthesis under global health law, including One Health and Planetary Health approaches, as well as through international human rights law like the recognition of the right to a clean, safe, and healthy environment. Guided by equity, new international law and global governance reforms, including the proposed Pandemic Agreement and Plastics Treaty, are opportunities to synthesize the intersecting dimensions of the environment and global health. However, future paths towards cohesion must explicitly incorporate human rights in environmental health governance, including the rights of Indigenous Peoples, while actively addressing inequities in global health law, between and within countries, and across generations.

Keywords: environmental health; international environmental law; climate change; global health law

Introduction

The relationship between the environment and human health has always been intertwined, but its recognition, and reflection in global governance, is relatively recent. While Indigenous and Global South approaches recognized this interdependence, international law's colonial origins ensured that a distinction between the environment and health was crystalized. This began to change in the Global North in the second half of the 20th Century, when the urgency of international governance for the environment and the protection of health was in part spurred by increasing public awareness of the importance of a healthy environment. In her influential 1962 book, *Silent Spring*, Rachel Carson reflects that "in nature, nothing exists alone." Despite this observation, the interconnected systems of planetary health have not been translated into international law until even more recently, with global governance for environmental health challenges artificially fragmented across the fields, institutions, and instruments of international law. However, new global paradigms for thinking about environmental health have emerged to foster synthesis under global health law, including One Health and Planetary Health, as well as international human rights law. The recognition of a right to a clean, safe, and healthy environment at the international level within the last few years exemplifies governance across domains. There are also significant opportunities in the path ahead to interweave environmental and health governance, including the proposed Pandemic Agreement and Plastics Treaty. Any future paths, however, must explicitly incorporate human rights, including the rights of Indigenous Peoples, in environmental health governance, and actively address inequities in global health law, between and within countries, and across generations.

Anthropogenic Fragmentation

The global governance space for environmental health has gradually developed over the past decades through separate but intersecting fields of law, instruments, and institutions. The pre-eminent area of global law protecting the "human environment"' is international environmental law, arising out of the 1972 Stockholm Declaration on the Human Environment. Since then, a range of multi-lateral environmental agreements (MEAs) have been adopted to govern specific environmental health threats, including damage to the ozone layer, long-range air pollution, management of hazardous wastes, chemicals, pesticides and persistent organic pollutants, as well as the devastating and all-encompassing impacts of climate change.[1]

Most MEAs acknowledge that their aim is to "protect human health and the environment," although few explicitly mention "environmental health."[2] For example, the preamble of the 1992 Convention on Biological Diversity acknowledges that "conservation and sustainable use of biological diversity is of critical importance for meeting the food, health and other needs of the growing world population," whereas the 2015 Paris Climate Agreement

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expressly acknowledges "the human right to health" as an important objective alongside needs to protect "Mother Earth" and ensure "climate justice." The prime importance of the Paris Agreement for health was underscored by World Health Organization (WHO) representatives, who called the Paris Agreement "potentially the most important public health agreement of the century."[3] This is a significant advancement on past practice: as Lawrence Gostin and Lindsay Wiley noted in 2009, global health advocates had historically failed to explore the potential of environmental policy as a crucial method for promoting health.[4]

Unfortunately, global governance for environmental health remains fragmented across instruments, fields, and institutions, potentially hindering necessary holistic protection of "planetary health," and within that, "human health." A first challenge is that within international environmental law, MEAs have been largely adopted to address single issue areas as they arose, typically under the lead of the UN Environmental Programme (UNEP) and with each agreement having its own distinct governance mechanisms — i.e., Conferences of Parties (COPs) and secretariats. There are good examples of cooperation between treaty secretariats and COPs, but most regimes still exist and operate largely in isolation.[5] Despite efforts to provide a unifying framework for these "different pieces" of environmental governance, bolstering cooperation among MEAs, the UN has faltered in developing a Global Pact for the Environment.[6]

Beyond the fragmentation under UNEP MEAs, there is further fragmentation across the UN — as other UN agencies also possess vital environmental health mandates, knowledge, and experience. For example, both WHO and the Food and Agricultural Organization of the United Nations (FAO) adopt relevant soft law instruments and monitoring tools that guide States in implementing sound environmental protection laws, policies, and standards.[7] There are good examples of integrated cooperation among these entities, including the development of inter-institutional partnerships to advance One Health,[8] but developing and maintaining sound cooperation across a range of environmental health threats will require continuous effort across international organizations.

Finally, there is fragmentation between global environmental governance and international human rights law in the protection of global health. It has long been recognized that human rights and environmental protection are closely interrelated and interdependent.[9] This interconnectedness is reflected in the notion that a "healthy environment" is an "underlying determinant for the right to health"; the "greening" of a wide range of existing human rights, including the right to life, in national and international jurisprudence; and the legal recognition of explicit rights to a healthy environment, most recently by the UN General Assembly.[10]

The legal recognition of the right to a healthy environment is generally viewed as a major triumph over fragmentation of international environmental law and human rights — leading to the incorporation of human rights language into new MEAs. However, there are also concerns that most fields, instruments, and institutions for global environmental health governance are highly anthropocentrically- and anthropogenically-oriented. While humans are certainly a major factor of environmental disruption in the epoch of the Anthropocene, and our species suffers from environmental pollution as a result, viewing humans as the causes and ends of environmental degradation/protection will ultimately be unhelpful. Such perspectives mistakenly place humans at the center and relegate "the rest" to peripheries of law-making. More holistic and nuanced "eco-centric" approaches, viewing humans as intrinsically part of a complex, wider, thriving living environment/ecosystems on Earth, will be vital for the future of environmental health governance and global health law.[11]

New Paradigms for Synthesis

Environmental health has progressively broadened its scope along with the emergence of new risk factors arising at the human-animal-ecosystem interface. In particular, specific environmental and ecological conditions — weather, land use, deforestation, and anthropization of wild areas — are now powerful drivers for the emergence or resurgence of infectious diseases of zoonotic origin. These diseases have become a major public health challenge with global dimensions, as demonstrated by the COVID-19 pandemic and other public health emergencies over the last two decades, including SARS, MERS, Ebola, Zika, and avian and swine influenzas. Such multidimensional health threats need to be addressed in an integrated and collaborative manner based on multisectoral, interdisciplinary, and inter-institutional cooperation, as advocated by the One Health approach. However, the intersections between human health and the environment go beyond these diseases. Multiple planetary crises — including climate change, pollution, and biodiversity loss — are causing profound harm to global health. This includes not only the environmental drivers of communicable diseases, but other global health challenges such as malnutrition, polluted water, cardiovascular and respiratory diseases, injuries, and mental illness. A relatively new approach — Planetary Health — seeks to respond directly to this complex issue, underpinned by the interconnections between human health and all of the Earth's natural systems. These two paradigms — One Health and Planetary Health — provide pathways toward greater synthesis in environmental health governance and global health law.

One Health

The One Health approach promotes a holistic vision of health and provides systemic responses to the challenges emerging from the complexity of interactions between humans, animals, and the environment. It can be fruitfully applied in addressing and mitigating the effects of zoonoses, food safety issues, antimicrobial resistance, and disease risks deriving from the alteration of natural habitats.

From a conceptual and operational point of view, One Health encourages and supports synergies between the human, veterinary, food, and environmental sectors, facilitating the integration of surveillance and control systems and the convergence of efforts aimed at achieving common global health objectives. From an institutional point of view, the One Health model requires inter-institutional, multisectoral, and multilevel involvement (a whole-of-government approach) and the establishment of specific governance mechanisms at global, regional, and national levels.[12]

Translating the One Health vision into practice has been facilitated at the global level by an initial alliance between the WHO, FAO, and the World Organisation for Animal Health (WOAH), which has fostered synergies in expertise, communication, standard setting activities, and operational tools. This partnership across the three organizations, known as the Tripartite, was formalized by a 2018 Memorandum of Understanding, which aimed to provide a stronger legal framework for the Tripartite collaboration to develop and implement a multisectoral approach to complex health challenges under the One Health perspective.[13] To integrate an environmental

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dimension within this multisectoral framework, a new Memorandum of Understanding was signed in 2022 to include UNEP — and officially give birth to the Quadripartite.[14] This enlarged partnership is successfully operating on the basis of common interests, complementary expertise, and converging competencies, with the Quadripartite coalition creating joint governance structures, consultation and coordination mechanisms, and operational tools. These new multisectoral actions are guided by the One Health Joint Action Plan (2022-2026), which complements and integrates other existing coordination initiatives at global and regional levels.[15] Synergic cooperation among these key institutions and other relevant stakeholders is essential to formulating the appropriate regulatory responses to emerging or re-emerging complex health threats, minimizing gaps or overlaps in normative regimes, and avoiding duplication of efforts or fragmented outcomes.[16] The Quadripartite represents an important step forward in breaking down silos in environmental health governance and overcoming policy and regulatory fragmentation in global health law.

Planetary Health

Looking beyond this One Health approach, Planetary Health recognizes that anthropogenic disruptions to the Earth's natural systems have profound impacts on human health.[17] The health impacts of these anthropogenic disruptions are disproportionately borne:

- within countries — where the systemic discrimination of marginalized populations — in particular inequities based on race, gender, and national origin — exacerbate environmental health impacts;
- between countries — where low- and middle-income countries experience greater harms from unsustainable development (like climate change) while high-income countries continue to disproportionately gain benefits from resource extraction and exploitation; and
- across generations — where populations have "mortgaged" the health of future generations for the benefit of economic development today.[18]

A Planetary Health approach recognizes that these are complex challenges with disproportionate burdens, and solving them requires equitable, systems-based, and right-to-health-based approaches.[19]

As a relatively new field, there is limited express inclusion of Planetary Health in global governance. However, this does not mean that Planetary Health approaches have been absent. Efforts to bring together health and environmental siloes in international law reflect Planetary Health: from incorporating health considerations into international environmental laws (such as the Paris Agreement and Convention on Biological Diversity) to embedding environmental considerations under global health law. Planetary Health approaches have the potential to facilitate synthesis across environmental health governance regimes for more cohesive, responsive, and equitable policy solutions.

The Path Ahead for Environmental Health Governance

There are several future pathways for synthesizing governance to more efficiently, effectively, and equitably address environmental health challenges. Institutionally, countries can resource and support the efforts of existing cooperative arrangements, such as the Quadripartite and memoranda of understanding between international organizations aimed at fostering cohesive approaches for intersecting issues. However, new international instruments provide substantive opportunities to synthesize global cooperation and collaboration for environmental health challenges. Two international instruments currently under negotiation are timely and relevant, namely the Pandemic Agreement and the Plastics Treaty.

The Pandemic Agreement

Given the challenges faced in the COVID-19 response, WHO Member States initiated negotiations in 2021 towards a new convention, agreement, or other international instrument for pandemic prevention, preparedness, and response — with this global health law reform coming to be known as the Pandemic Agreement.[20] Since the proposed treaty's inception, Lawrence Gostin has been a champion and advocate of the Pandemic Agreement's potential to close gaps in global health law for pandemics and prevent the inequities seen during COVID-19.[21] While the initial proposed breadth of the potential treaty was expansive, over the course of intergovernmental negotiations, provisions clearly related to environmental health and pandemics have been weakened, while civil society has raised concerns with the watering down of human rights language across the treaty.[22] In the version of the draft agreement presented to the World Health Assembly, both the preamble and the binding principles (which aim to guide interpretation and implementation of the treaty) refer to the right to health; however, reference to binding international human rights obligations is limited to "respect[ing]" human rights, instead of the broader suite of obligations on states to "respect, protect, and fulfill" human rights. Further, express incorporation of rights to non-discrimination, gender equality, and the protection of vulnerable persons, and obligations to meaningfully engage with Indigenous populations, which could guide and facilitate more equitable and effective upstream environmental health prevention efforts, have proven particularly controversial for some countries with contrary national agendas.

Similarly, the explicit incorporation of a One Health approach in the Pandemic Agreement has been the subject of substantial debate during intergovernmental negotiations, with several Global South countries raising concerns about the approach's impacts on national health priority setting and the lack of sufficient financing for implementation. While early drafts of the Pandemic Agreement also expressly included reference to climate change and biodiversity loss, recent iterations subsumed environmental concerns into more general language regarding the upstream "drivers" of pandemic emergence.[23]

Despite this progressive weakening of Pandemic Agreement obligations for human rights and upstream environmental approaches, WHO Member States were unable to reach consensus by the initial deadline (the 77th World Health Assembly in 2024), resolving to extend negotiations for up to an additional year. There is still opportunity for WHO Member States to explicitly incorporate stronger environmental health and human rights considerations relating to both the upstream drivers of pandemics and the particular vulnerabilities and inequities that exacerbate the impacts of pandemics. This is an urgent task given emerging threats that underscore the One Health and Planetary Health dimensions of pandemics.[24] However, this will require WHO Member States to overcome the fragmentation that has long hobbled environmental health under global health law.

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The Plastics Treaty

On a similarly rapid timeline, States agreed in 2022 to begin negotiations toward a new treaty to address plastic pollution, seeking to reach consensus and adopt this Plastics Treaty by the end of 2024. The proposed treaty seeks to address the full lifecycle of plastics, enhance their reuse and recyclability, and facilitate international technology transfer, capacity building, and scientific cooperation.[25] Central to global health, plastic pollution contributes to all three pillars of the triple planetary crisis, as plastics: are on track to account for 15% of allowed greenhouse gas emissions to limit global warming at 1.5°C by 2050;[26] threaten the lives of more than 800 marine and coastal species through ingestion and entanglement;[27] and contribute to air, land, and ocean pollution. Beyond the health impacts of plastics through their impacts on planetary systems, plastics directly affect human metabolic, hormonal, and neurological functioning.

A revised draft produced by UNEP referenced the health impacts of plastics pollution throughout the text, with a proposed article dedicated to health-related activities, including collaboration with the WHO and other relevant international organizations. Although the initial zero draft of the proposed treaty made no express mention of human rights, the revised text included preambular language relating to the right to a clean, healthy and sustainable environment and the United Nations Declaration on the Rights of Indigenous Peoples. In addition, the current draft of the Plastics Treaty includes proposed provisions to ensure a Just Transition, which must include the promotion of human rights.

Like the Pandemic Agreement, the Plastics Treaty fails to capture the suite of obligations on States under international human rights law to respect, protect, and fulfil human rights, but with underpinning principles of a systems-based approach, circular economy, and intergenerational equity, the Plastics Treaty presents a profound opportunity to realize a Planetary Health approach in global environmental governance and global health law.

Conclusion

Environmental health governance has been slow to reflect the intertwined nature of the environment and human health. Yet despite the distinct origins of international legal paradigms and fragmentation of environment and health issues between institutions and instruments, these fields have been brought closer together through the development of international human rights law and synthesizing approaches like One Health and Planetary Health. New governance efforts, including the proposed Pandemic Agreement and Plastics Treaty, pose opportunities to translate this synthesis into global health law, bringing together the environment and global health.

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