Abstract

Linkages between health and the environment are increasingly recognized, but human rights law still does not provide an adequate framework for dealing with those connections. Environmental health issues now are seen as involving many institutions, processes, actors, and causes that are not immediately obvious. This reality requires changes in the human rights agenda. Practitioners should not take an overly legalistic and norm-based approach to health and the environment. While the right to a healthy environment is a useful concept, it is more effective to focus on how to implement the right to health from a policy perspective. Practitioners need to think about how human rights approaches can pressure decision-makers and social institutions to consider the environmental causes of ill health. Finally, it is hoped that human rights and environmental movements will work together more effectively in the future.

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Les liens unissant les domaines de la santé et l'environnement sont de plus en plus reconnus, bien que la législation des droits de l'homme n'offre pas un cadre suffisant pour en traiter. On sait aujourd'hui que les questions relatives à la santé environnementale impliquent un grand nombre d'institutions, de processus, d'acteurs et de causes qui ne sont pas évidentes au premier abord. Ce fait nécessite une rédéfinition de la façon dont les droits de l'homme sont abordés. Les praticiens doivent se garder d'adopter un approche trop légaliste et normative par rapport à la santé et à l'environnement. Bien que le droit à un environnement sain soit un concept utile, il est plus efficace de se concentrer sur la mise en oeuvre du droit à la santé du point de vue des politiques que s'y rapportent. Les praticiens doivent réfléchir à la façon dont les approches basées sur les droits de l'homme pourraient faire pression sur les preneurs de décision et les institutions sociales afin que ces derniers considèrent les facteurs environnementaux affectant la santé. Finalement, il est à espérer que les mouvements sur les droits de l'homme et l'environnement coopéreront d'une manière plus efficace à l'avenir.

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Los vínculos entre la salud y el medio ambiente son cada vez más reconocidos, pero los derechos humanos todavía no proveen un marco adecuado para tratar estas conecciones. Los temas de salud ambiental actualmente se consideran como incluyendo a varias instituciones, procesos, actores, y causas que no se evidencian de manera inmediata. Esta realidad requiere que se hagan cambios en la agenda que abarca los derechos humanos. Los profesionales no deben tomar un enfoque demasiado legalista o uno muy basado en normas, en cuanto a la salud y el medio ambiente. Aunque el derecho a un medio ambiente saludable es un concepto útil, es más efectivo enfocar en cómo implementar el derecho a la salud desde una perspectiva de la política. Los profesionales deben pensar sobre como los enfoques a los derechos humanos pueden presionar a las autoridades e instituciones sociales a considerar estas causas. Finalmente, se espera que, en el futuro, los movimientos a favor de los derechos humanos y del medio ambiente trabajen de manera más eficiente.

HEALTH AND THE ENVIRONMENT:
A Human Rights Agenda
for the Future

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Environmental factors are increasingly understood to affect human health in significant, yet still largely unknown ways. The health of millions of people around the world depends on their access to such environmental goods as uncontaminated water. Industrial society generates a broad variety of pollutants and wastes that can adversely affect human health, and loss of biological diversity may destroy habitats that play a vital role in holding together human communities.

Traditionally, both health and environmental concerns have been peripheral to the human rights field. The health impacts of environmental conditions have been framed as an environmental health problem, amenable to a relatively narrow scientific analytical process and remediable by technological means. Considerable research has already been carried out on environmental health issues, with many substantive outcomes. The weaknesses in the application of this research are partly due to a lack of consideration of human rights norms. Businesses seldom consider environmental health in their decision-making processes; governments often ignore the impact of their policies on health, for example, their influence on particular patterns of energy and material use. Environmental health has not been considered in deeper and more systematic ways; and environmental and health dimensions have not been integrated into human rights concerns.

In short, human rights approaches have yet to be suffiently applied to modern health and environment issues. Three factors seem responsible. First, confusion persists over what kinds of conceptual principles are to be used in applying human rights to

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environmental health problems. The right to a healthy environment, while a useful broadening concept, strains the human rights framework and shifts the debate to a legalistic and norm-based level, without always revealing critical structural and power issues. Second, the human rights framework needs to be expanded to target the causes and pathways of environmental health problems instead of their effects. Third, there has been a failure to build a stronger alliance between the human rights and environmental movements.

Interaction between Health and the Environment

Present knowledge about interaction between health and environmental conditions is complex and inadequate. A wide range of international and domestic bodies, such as the United Nations Commission on Human Rights, the World Bank, and the World Health Organization (WHO), now recognizes the linkages between health and environment.[1] While there is burgeoning interest in researching and explaining these linkages, many obstacles remain. For example, some environmental degradation has a long latency period, and other degradation occurs on such a scale that it defies foresight and data gathering.[2] Additionally, many risk factors may interact synergistically, making it extremely difficult to predict their effects.

The scope of environmental health issues has expanded gradually over the past four decades, from a narrow focus on refuse and sewage, to increasingly diffuse and complex phenomena that involve multiple connections between social, economic, political, and ecological elements.[3] Environmental problems such as air pollution or waste disposal are more readily recognized as health problems because of their greater visibility of effects. The first laws aimed at environmental health were public health regulations concerning the abatement of nuisances and the control of urban wastes.[4] These early environmental laws had a strong human health rationale, subsuming what had been treated as public health problems. The framing of problems in terms of visibility meant that technological and "end-of-pipe" solutions tended to be preferred.[5] These solutions attempt to reduce emissions of pollution only after manufacturing with technical equipment like scrubbers and stack towers.

Over time, conventional hazards have been more subtly analyzed. For example, public health experts suspect that the

precipitious decline in the longevity of Russians from 64 years to 57 years in the past few years is not merely caused by the disintegration of the Russian health care system, but may also be related to the cumulative effects of extensive past exposure to environmental hazards such as the emission of radioactive particles or massive air pollution.[6] Likewise, in 1995, a team of researchers from the Harvard School of Public Health and the American Cancer Society released a study of 151 U.S. cities suggesting that the risk of mortality is intensified by 15 to 17 percent for people residing in more intensely air-polluted urban areas.[7] Even modest pollution exposures, below current standards set by the U.S. Environmental Protection Agency (EPA), appear to truncate lives by several years.

The quality and availability of basic environmental goods (like water and soil) have also been recognized as sources of health problems. WHO estimates that at least four million infants and children die each year from diarrheal diseases, while over 210 million malnourished children are more vulnerable to infections, partly because of land degradation.[8] Cholera is promoted by a scarcity of safe drinking and household water in many communities. Many diseases, such as malaria, involve vectors that are affected by environmental conditions like temperature and seasonality.[9] These problems were once seen as infrastructure development issues, solveable through technological and scientific means. They are now increasingly acknowledged to raise broader public health questions.

Both the growing understanding of environmental health risks and the persisting deficiencies of that insight are highlighted by issues related to indoor air quality. While second-hand tobacco smoke is the best known example, many other indoor air pollutants may have more insidious and longer term consequences for health.[10] Volatile organic compounds are commonplace in modern offices and are suspected of creating new risks, but their biological effects are poorly known. In addition, WHO emphasizes that many serious respiratory ailments experienced by people in developing countries arise from everyday exposure to smoke from burning coal or wood.[11]

Yet the newest phase in understanding health and environment has only started. Pathways and causes of environmental health problems are much less well understood than many of their effects. Many environmental factors may not yet be regarded

as directly relevant to human health: much recent environmental policy work emphasizes that complex "ecological shadows" exist in both industrialized and developing countries.[12] These shadows refer to broader connections between cause and effect. For example, an industrial process may use resources that come from mines far away, where the mining destroyed the habitat and livelihood of a community of indigenous people. Or, an industrial process may discharge substances into a river which carries pollution into ecosystems located downstream. Shadows may be more pervasive, insidious, and influential than immediate causes.

An interlocking network of institutions, processes, structures, and relations within society are involved in the broader view of environmental health. A business's decision to site a plant, produce a good in a particular way, or disregard contingent liabilities, can all affect health adversely. In turn, these decisions are made in a context within which industry structure, economic dynamics, and government regulation are major influences. Even though the immediate cause appears relatively simple, many factors may converge to produce environmental health problems. Without addressing these interlaced causes and pathways, attempts to rectify health problems by targeting the immediate causes may not be effective.

This is true also of global environmental change, which is deeply bound up with societal structure and organization. The spatial layout of a city may stimulate greater use of cars, and consequently promote the emission of greenhouse gases. Conversely, the use of cars may be decreased through government spending on public transportation.[15] Consciousness of these more remote causes and pathways did not begin to emerge until the 1980s.

Environmental Health from a Human Rights Perspective

Historical development of human rights discourse affects the current debate about environmental health. Traditionally, human rights tended to concentrate on the development of legal norms expressed in formal instruments, and on the use of civil and political rights to highlight violations by governments.[16] An early priority of the human rights field was to build an international system of formal text-based rights, following the Univer-

sal Declaration of Human Rights, forming a package of norma-
tive rules that are thematically inseparable and universally bind-
ing. [17]

Two important trends characterized early human rights dis-
course. First, the norm-based approach encouraged a legalistic
and adjudicatory model for improving the observance of human
rights.[18] This had substantial implications for the choice of strat-
egies to implement human rights.

Second, civil and political rights such as those to life, free
expression, and political participation received much more at-
tention than social and economic rights.[19] These latter rights of-
ten have been tempered strongly by governments because of their
perceived positive nature in imposing obligations on the state to
create the conditions required for the rights to be observed ad-
equately. The right to health, for example, may demand that gov-
ernments dedicate substantial budgetary spending to providing
health care services to the entire population. Economic and so-
cial rights clearly involve pressuring various actors into resource
commitments and distributional choices that they often would
rather refrain from making.

Traditional approaches to human rights theory and practice
also tended to de-emphasize the interaction between rights and
their social context. They ignored the ways in which the causes
of violations of social and economic rights (as well as civil and
political rights) are entangled with social structures and processes,
and thus require more than legalistic measures. This approach
also limited the analytical reach and practical implementation
of human rights. Nonetheless, there has been a slowly develop-
ing interest in social and economic rights, notably, the right to
health.[20]

One aspect of this trend is the increasing interest in envi-
ronmental health within the human rights framework. In par-
ticular, during the past 20 years, the right to a healthy environ-
ment has become more commonly cited in analysis of health
and environmental issues.[21] This right is not found in the major
international human rights documents, though it is specified in
a number of national constitutions (e.g., Brazil and South Ko-
rea).[22] There are also many competing formulations of the right
to a healthy environment: some contend it should be confined
to safeguarding human health through controlling and reducing
environmental risks, while others promote a larger vision.[23]

Yet all the various proposals recognize that human rights can be powerful instruments because they are normative standards centered on people. As Freedman has emphasized in the context of the right to health, human rights concentrate social and political attention on the needs and experiences of people.[24] Whereas more technocratic approaches favor top-down and mechanical solutions, human rights give priority to redressing disadvantage in social life, and to protecting and empowering vulnerable people in their particular circumstances.

To a limited degree, the right to a healthy environment has also helped broaden public health discourse to include social, cultural, political, and economic conditions. This is not a novel idea in environmental health; the U.S. Institute of Medicine defined the mission of public health as "the fulfillment of society's interest in assuring the conditions in which people can be healthy."[25, 26] The conditions required for health are wide-ranging and include access to housing, employment, and education as well as protection from environmental degradation. Yet, the Institute of Medicine report found that environmental health issues were characterized by "disjointed policy development, fragmented service delivery, lack of accountability, and a generally weakened public health effort."[28]

More recently, a broadening perspective has been articulated by the emerging health and human rights field. In this view, public health and society are considered "inextricably linked," and health is seen to be influenced by social realities such as occupation, class structure, or the prevailing political economy.[29] The conditions underlying physical, mental, and social well-being also need to be identified and targeted by health professionals. Practitioners now are beginning to make the links between environmental health and human rights in diverse situations around the world.[30, 31] One example involves the health impact of environmental degradation brought about by the Ecuadorian oil industry.[32] Also, in 1991, the Sierra Club of the United States brought two matters before the UN Subcommission on Prevention of Discrimination and Protection of Minorities, though without success.[32] The conceptual and practical analysis of environmental health from a human rights perspective remains embryonic.

The effects of such poverty of thought and work can be seen in various ways. Notably, the United Nations Commission on Human Rights did not engage in detailed analysis of health prob-

lems in its 1995 report on human rights and the environment.[35] The report also concentrated more on the role of civil and political rights, such as the right of environmental activists to express their views freely. Moreover, even though the Commission recently held consultations on the linkages between the life sciences and human rights, its resulting report failed to mention environmental issues.[36] Thus, the broadening trend is still highly uneven and incomplete.

An Agenda for Health, Environment and Human Rights?

Some important progress in linking environment and health issues has occured. There is growing, fruitful attention to how human rights norms can be operationalized in environmental health terms. Yet the human rights debate currently suffers from several key problems that may inhibit its further development and which must be considered part of a future agenda.

Which human rights norms to rely on?

The theoretical literature has often tended to blur health and environment without appreciating that preserving ecological integrity needs to be distinguished from protecting human health.[37]

In particular, a number of commentators advocate that the environment be regarded as having a juridical right inherent in its existence. Nash, for example, argues that rights can be extended to organisms that have morally justified claims against human beings for their continued existence and welfare and that in the face of human encroachments, living elements of the biosphere have a right to health.[38] An international covenant on environmental rights has been drafted, taking this biocentric perspective and analogizing environmental rights to human rights.[39]

Other commentators have advocated the right to a healthy environment. They urge that a new international protocol be added to existing human rights conventions, or that these conventions be amended. Yet as Alston has pointed out, proliferation of increasingly specific and abstract rights can debase the value of human rights as agents of political and legal pressure more broadly.[40] This can lead to a loss of political saliency and juridical credibility.

While the right to a healthy environment can be unifying in making government and business actors aware of the environ-

mental health dimensions of their decisions and policies, it should not be leveraged into a formal right. Rather than the right to a healthy environment being enacted into law, the existing right to health (and other related rights such as the right to a safe workplace) can be interpreted much more holistically to cover the complex dimensions of environmental health.

In addition, human rights standards have their limitations. For example, they are unable to be readily applied to settle many environmental issues, such as whether a species should be preserved in light of a people's need for economic development through the construction of a dam. Environmental problems are too complex, fragmented, and interrelated to be resolved by any one problem-solving technique. Instead, a comprehensive strategy with many techniques, participants, institutions, and processes is required. Activists and scholars should not try to apply human rights universally and uncritically to the environmental context. Once this limitation is recognized, human rights approaches can play a potentially powerful role in catalyzing change, by targeting policy-making as a whole and forcing it to take account of environmental health issues.

In short, the human rights agenda should be to pursue expansion of the substantive interpretation of the right to health, rather than to focus on the creation of environmental rights and formalization of the right to a healthy environment.

Framing Environmental Health Rights

Too little attention has been given to how environmental health and human rights issues are framed and operationalized. The debate on reform has not moved much beyond argument over what kinds of legal norms are needed. What matters, though, is not how human rights are defined, but how they are implemented. Since human rights are inherently indeterminate, without any fixed or static content, they can be known only through experience and practice. They are principles codified through application to numerous and varying settings.

As discussed previously, the environmental causes of health problems cannot be disentangled from their broader social, political, cultural, and economic context. The right to health involves diverse elements in social life that go far beyond the immediate physical causes of ill health. Governments may not realize that their regulations can significantly and adversely im-

pact health, even if aimed at environmental protection. Creation of tradeable pollution permit systems can lead to a concentration of pollutants within specific neighborhoods because some companies may choose to buy permits rather than innovate their industrial processes. By allowing timber to be logged, the ecological stability of a region may be undermined, including changes in water and other ecological supplies that ultimately end up harming human health. Ignoring the input of local communities in government decision-making regarding the building of an industrial mill may mean that the potential health effects of the mill is disregarded.

It may seem that human rights concerns are remote from these issues and settings. But these examples highlight the failure to think about the pathways and causes of environmental health problems. The full range of causes and pathways, even if apparently remote, needs to be considered and integrated into policy-making.[41] Complex feedback effects, especially non-linear ones, mean that changes induced in one part of the system can influence other parts.[42] It is not easy to separate the various pathways and causes that may be interacting to create a particular health problem. New analytical methods are needed to understand what can be done to improve environmental health.

In essence, the agenda should be to develop new models which use human rights to target the causes and pathways of environmental health problems. The priority should be to focus on those institutions, processes, relations, and structures that mediate environmental health outcomes. How can these elements be rebuilt or restructured to improve environmental health? Moreover, how can human rights standards be used to encourage and urge this work? Instead of adopting a legalistic and adjudicatory model, practitioners and scholars must start thinking about how policy can be used to advance the right to health from an environmental health perspective.

A striking feature of the Institute of Medicine's report is its emphasis on policy-making as the arena for change.[43] While legislation and litigation can create pressure, and help make those in power accountable, policy-making will ultimately have the farthest reaching impact on public health. Corporations need to transform their internal processes and decision-making; banks need to appraise how their loans for project development may indirectly help create ill health; governments need to scrutinize

their regulations and policies for perverse health consequences; public health authorities need to integrate environmental health into their programs.

It has been said that creating access to international mechanisms for enforcing human rights can provide a new tool to improve environmental health.[44] This may be true, but only to a very limited degree, since environmental health problems largely arise from the complex, often interlocking ways in which institutions, processes, and economies interact through time and space. No single party is likely to control these interactions. No single jurisdiction or institution can bring about all the requisite changes. Determining that a country has violated the right to health may be publicly damaging, but it will not change the market dynamics that generate environmental health problems. Thus, it is more important for human rights activists and scholars to operationalize the right to health by working out how to affect and shape policies regarding the environmental health dimension.

For example, during the 1990s, the Xerox Corporation has striven to reduce waste outputs through corporate re-engineering.[45] Xerox has redesigned some product parts to consume fewer resources and produce fewer wastes. The parts are theoretically more readily recycled and substituted across products in a range, so that fewer parts are needed. These initiatives may reduce adverse environmental health effects, although they have not been considered by policy-makers and corporate managers in this light. How can human rights standards be used to put pressure on governments and corporations to undertake such changes? How can policies be designed to provide corporate incentives to engage in these practices?

Old legalistic and adjudicatory approaches to human rights are obsolete in the face of the complexities of environmental health. Yet newer approaches require comprehesive strategies which involve both the environmental and human rights movements.

A Coalition Between the Human Rights Movement and Environmentalism?

Overall, there is a striking lack of interaction between the human rights and environmental movements. There is an apparent divide between human rights nongovernmental organizations

(NGOs) and environmental NGOs, while in theory, there should be ample overlap between them.

It is important to emphasize that there are no unified movements. Rather, numerous groups and alliances exist with many divergent goals, methods, and ideologies. While there have been collaborative efforts in the past 20 years, relatively little has been achieved, at least from the structural and systemizied perspectives that have been advocated here.[46] The flow of support and ideas between the environmental and human rights movements is very uneven and dynamically fluctuating. When campaigning for reform, environmental movements mostly have focused on how civil and political rights can be used to protect their members, while human rights movements have tended to ignore environmental issues except as far as they are salient to specific domains such as indigenous peoples or the right to development.[47] The right to health has seldom been explored from both environmental and human rights perspectives simultaneously.

There are various reasons for this lack of interaction. In the United States, as well as in other developed countries, there has been a strong institutional separation of environmental and public health issues, as a result of the "environmental age."[48] Formerly, environmental health issues were overseen by public health authorities, but were taken over by the large environmental regulatory agencies and frameworks after the 1960s. Environmental laws took the place of public health policies; environmental issues were then less analyzed in terms of their health dimensions.

The conceptual foundations of environmentalism and of human rights have also contributed to the bifurcation. For example, the human rights movement may not be as comfortable with policy-based approaches as with more legalistic and discrete frameworks for treating social problems. As an example, Nickel has commented that the reason the right to a healthy environment is beneficial is because it permits environmentalists to link their work to the international legal institutions that implement human rights.[49]

Environmental activists need to think about how human rights can play a compelling role in their work. One interesting recent manifestation of the growing interest in health issues by these activists is the environmental justice movement in the United States.[50] Since the late 1980s, there has been intense debate over whether environmental risks are disproportionately

concentrated in specific areas, especially those with predominantly poor African-American populations.[51] Evidence suggests that industrial plants and waste disposal sites tend to be found more often in those neighborhoods. A range of corporate and governmental actors have been criticized for decision-making that failed to take account of where environmental risks would be located, or even for making choices that target deliberately these neighborhoods.

In the United States, the debate has thus far largely been framed in terms of domestic civil rights and constitutional protections. The Clinton Administration has issued an Executive Order requiring federal authorities to review their policies and regulations for potential environmental justice impacts.[52] This is likely to be more effective in the longer term than litigation and other legalistic approaches. Few links have been made to international human rights, though some environmental activists and scholars are now investigating these possibilities.[53] International human rights groups have not contributed much so far, partly because of their organizational mandates, and partly because of the limited conception of human rights still prevailing.

The U.S. based environmental justice movement, faces many difficulties. First, it claims to be rights-based, but it may be perversely trapped within a limited viewpoint that tends to emphasize racial segregation rather than class-based segregation. Moreover, the current framing of environmental justice in terms of civil rights and constitutional protections constrains a vision of the issues at stake. Human rights cover much more than discrimination: it is not necessary to establish that individuals or groups are being discriminated against when their human dignity and rights are impaired. Finally, many advocates assert that environmental justice is best served by spreading the environmental health risks more equitably. This is a laudatory goal, but ignores the possibility that measures can be taken to reduce these risks by targeting their causes and pathways.[54]

What might human rights standards be able to accomplish? If the structural and systemized perspective described here is adopted, human rights standards can be used to expand the debate to become more holistic and cause-oriented. Human rights are not static, but encourage a dynamic problem-solving approach that places the needs and experiences of people at the center of

policy. In sum, for the right to health to be advanced, stronger and more dynamical alliances need to be built between human rights and environmental movements around the world.

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43. *The Future of Public Health*, see note, 25, Chapter 5 ("Public Health As A Problem Solving Approach").

44. J.W. Nickel, "The Human Right to A Safe Environment: Philosophical Perspectives on Its Scope and Justification," *Yale Journal of International Law* 18 (1993):281, 283.

45. See Harvard Business School Case 794-022 in F.L. Reinhardt and R.K. Vietor, *Business Management and the Natural Environment* (1996), pp.3-124.

46. Important recent reports by environmental NGOs on human rights issues include Human Rights Watch/Natural Resources Defense Council, *Defending the Health: Abuses of Human Rights and the Environment* (1992); and Worldwatch Institute, *Eco-Justice: Linking Human Rights and Environment* (1995). These reports, nonetheless, concentrate on how human rights may be used to protect environmental activists, rather than seeing how environmental issues interact with social and economic rights such as the right to health.

47. See, e.g., the material collected in B. R. Johnston (ed), *Who Pays the Price? The Sociocultural Context of Environmental Crisis* (Washington DC: Island Press, 1994).

48. *The Future of Public Health*, see note 25, p.110.

49. J. W. Nickel, "The Human Right to A Safe Environment: Philosophical Perspectives on Its Scope and Justification," *Yale Journal of International Law* 18 (1993):281, 283.

50. B. Bryant (ed.), "Environmental Justice: Issues, Policies and Solutions," (1995).

51. Ibid.

53. See, e.g., R.D. Glick, "Environmental Justice in the United States: Implications of theInteranational Covenant on Civil and Political Rights," *Harvard Environmental Law Review* 19 (1) (1995):69.

53. Executive Order 12,898, 59 Federal Register 7625 (1994).

54. An excellent exception is B. Bryant, "Pollution Prevention and Participatory Research As A Methodology For Environmental Justice," *Virginia Environmental Law Journal* 14 (589) (1995). Bryant points to the kind of structural and causal analysis that could fruitfully be taken up by the human rights movement with regard to environmental health.