
Environmental Justice for Older Persons: Vulnerability, Climate Change and the Right to Health under International Law

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ABSTRACT

Climate change has progressively transformed environmental protection into a structural human rights issue rather than a regulatory concern. Despite the expansion of the environmental justice paradigm within international law studies, the ageing population remains inadequately examined as a distinct form of vulnerability in climate policy. The physiological ageing process, heightened frequency of chronic diseases, social isolation, and reliance on infrastructure significantly exacerbate susceptibility to climate-related hazards, including extreme heat, air pollution, and displacement due to disasters. Despite this apparent deficiency, global environmental and climate frameworks frequently fail to expressly delineate age-sensitive commitments. This research study examines environmental justice in relation to ageing and climate change, highlighting a normative disparity between the legal guarantees of equality under International Human Rights (IHR) law and the real environmental experiences of older persons. The document demonstrates that the legal duty to implement age-responsive climate adaptation measures is being imposed on states via existing legal obligations derived from the principles of the right to health and non-discrimination, as analysed through international treaties, General Comments, UN resolutions, and climate instruments. The failure to accept ageing in environmental governance may constitute indirect discrimination and undermine substantive equality. The study presents a rights-based environmental justice paradigm that incorporates the obligations of ageing, public health, and climate within contemporary international law.

Keywords: *Environmental Justice; Ageing; Right to Health, Climate Change, SDGs.*

INTRODUCTION

Environmental degradation transcends ecological management and has emerged as a critical problem of international legal accountability. Climate change, biodiversity loss, and pollution persist in undermining the fundamental enjoyment of core human rights. The Assembly's acknowledgement of the human right to a clean, healthy, and sustainable environment signifies the consolidation of environmental protection within the human rights framework, which does not impose new obligations but rather establishes interpretive coherence with existing treaty-based commitments. Simultaneously, demographic ageing is one of the greatest structural changes of the twenty-first century. The UNDESA estimates that the elderly population over sixty-five years old is expected to overtake its population by more than two times by 2050, and ageing rates are rocketing in both developed and emerging countries. The periods and intensities of heatwaves are growing; there is a continuous threat to respiratory health from air pollution, and extreme weather events cause a break in the work of the public health infrastructure. Demographic ageing, when colliding with the instability of climate, forms a tier of vulnerability that has not been adequately theorised by the discourse of international law. Climate governance frameworks often reach out to vulnerable groups, but vulnerable groups are often sought with the priority on women, children and indigenous people. Older people are seldom singled out specifically in global climate tools, even with the overwhelming evidence of disproportionate risk. The WHO has stated several times that the elderly are exposed to greater mortality and morbidity caused by heat stress and air pollution. Age-related physiological alterations lower the effectiveness of thermoregulation and load cardiovascular functions. Moreover, the elderly are increasingly dependent on the continuous provision of pharmaceuticals, electricity, healthcare services, and social service networks, which may be disrupted in the event of an environmental catastrophe. This disparity engenders normative concerns. Article 12 recognises the right to the highest attainable standard of health, emphasising that this right extends beyond medical care to include underlying factors, such as environmental conditions, that could negatively affect the health of specific population groups. This lack of age-sensitive climate adaptation strategies thus makes the matter concerning the observance of substantive equality and non-discrimination requirements questionable. This normative gap has been aimed to be filled in this research paper. It puts forward three main arguments. First, the theory of environmental justice offers a logical model on how age-based climate vulnerability can be comprehended in terms of distributional, procedural and recognition justice. Second, the current IHR law already has positive duties on states to respond to the risks to the environment regarding age under the principles of the right to health and equality. Third, not incorporating ageing into the governance of climate may amount to indirect discrimination in which neutral policies make older people disproportionately disadvantaged.

Environmental Justice and Age-Based Vulnerability

The phrase "international environmental law" only became popular following the 1972 Stockholm United Nations Conference on the Human Environment, despite its relevance today. The declaration that emerged from the conference was noteworthy because it held states accountable for "activities within their jurisdiction" that resulted in "damage to the environment or other states or areas" outside of their borders. Among the tenets of international environmental law are states' duties to prevent, lessen, correct, or make amends for harm, to inform and confer with others regarding risks, and to attempt to settle disputes amicably. However, "evidence of general state practice and opinion juris" would be needed for these principles to be accepted as customary law. A lot of experts concur that both new laws and changes to current ones are necessary to achieve sustainability. Less frequently recognized, though, is the fact that sustainability can also be achieved by modifying current legal frameworks in tiny, gradual ways or by applying existing laws to new issues. These laws are not solely environmental in nature, even though many of them are. For instance, the California Attorney General and nongovernmental organizations used litigation under the 1970 California Environmental Quality Act (CEQA) to force Californian municipalities to take greenhouse gas emission impacts into account when making land use decisions. Further, Article 38(1) of the Statute of the International Court of Justice recognizes multilateral environmental agreements, which are a subset of international conventions, as a source of international law that focuses specifically on environmental issues. It is crucial to remember that, despite their influence, court rulings and legal writings are only secondary methods of establishing the law and not legally binding sources in and of themselves. Environmental justice is an uncodified doctrine of treaties that has gained normative significance in international law studies. It comprises three dimensions that are parallel to each other, and they include distributional justice, procedural justice, and recognition justice. These dimensions in combination inform us about the way in which climate change creates structural imbalances that impact older adults. Distributional justice deals with the fair distribution of environmental harms and gains. The population is not the one affected uniformly by climate change. The epidemiological evidence of several jurisdictions supports that during extreme events of heat, the concentration of mortality is in older age categories. The 2003 European heatwave that caused about seventy thousand unnecessary deaths disproportionately hit older people living alone or in low-insulated housing, but this was not inherent failures of the conventional plan of adaptation, systems of warnings,

and even social security. Distributional injustice thus occurs when environmental damage is predictable and falls disproportionately on a group of people, and when the states will not take relevant preventive actions. Distributional injustice has legal implications based on the principles of equality. Article 2 of the International Covenant on Economic, Social and Cultural Rights forbids discrimination based on such grounds as other status. Age is part of this category of interpretation. Substantive equality implies that states should overcome structural disadvantage using special programs. Indirect discrimination can be repeated because climate adaptation policies do not address age sensitivity vulnerability. Procedural justice addresses distributional issues by putting emphasis on the involvement in environmental decision-making. According to Principle information, participation, and justice to the environment are a reality, but they do not guarantee proper participation. Relying more on digital consultation systems can potentially discriminate against the elderly who might be technologically illiterate or have no access to the Internet. Engagement is also curtailed by mobility impairment and social isolation. Structural exclusion can be replicated by procedural frameworks that lack reasonable accommodation. Recognition justice deals with social invisibility and systemic marginalisation. In most societies, a form of discrimination is ageism, which manifests in several ways and is mostly based on the stereotypes which portray a person of old age as dependent or economically idle. Equality and dignity, are not mere symbolism and the recognition of older persons as rights holders is another legal Act. The necessity of ageing in environmental justice is that it must be explicitly entrenched into vulnerability assessment and policy formulation. The application of environmental justice to international law is the ability to balance sustainability principles with climate protection. It offers an interpretive construct based on which the pre-existing human rights commitment can be operationalised in relation to environmental danger.

Legal Framework

Older individuals can be protected from environmental harm through a robust normative framework in international human rights law. Article 12 of the International Covenant on Economic, Social and Cultural Rights recognises the right to the best attainable standard of health. General Comment No 14 elucidates that fundamental aspects, encompassing environmental conditions and industrial hygiene, pertain to this right.

The right to health imposes upon states the threefold obligations to respect, protect, and fulfil. Respect will preclude policies that exacerbate environmental degradation. Protection involves regulating the behaviours of individual agents that contribute to pollution. Fulfilling requires proactive measures to prevent foreseeable health risks. States must implement targeted adaptation strategies to enhance heat action plans and infrastructure resilience, as scientific research indicates that elderly populations are at a heightened risk of heat-related death. These responsibilities are reinforced by obligations of equality. Indirect discrimination refers to the unequal disadvantage experienced by a certain group as a result of policies intended to benefit all individuals. Climate adaptation measures that neglect age-related vulnerability will produce discriminatory outcomes, even in the absence of explicit prejudice. Age-sensitive planning is essential for achieving substantive equality.

This finding is substantiated by the tenets of environmental law. The Paris Agreement's preamble acknowledges that climate action must uphold and promote human rights; while it does not explicitly include vulnerable groups, it permits interpretation to encompass age-based protections. The precautionary principle obligates authorities to act in response to significant environmental threats. Precautions necessitate preventive measures when the risk is disproportionate in elderly populations. Finally, the UN General Assembly's recognition of the human right to a clean, healthy, and sustainable environment enhances the normative coherence between the concepts of environmental preservation and equality within the framework of the ICESCR.

United Nations Conference on the Human Environment (Stockholm Declaration, 1972)

After the United Nations Conference on the Human Environment (Stockholm Declaration, 1972), the world environment was recognized as a shared treasure of all people. The universal imperative for public cooperation in environmental protection, as manifested in various binding and non-binding legal instruments and their implementation at both global and regional levels, is unequivocally articulated in the Stockholm Declaration of 1972, which establishes the legal foundation for the principle of cooperation in international environmental law. The Stockholm Declaration of 1972 says that all countries must work together to improve international law on liability and compensation for people who have been harmed by pollution or other environmental damage caused by activities that are within their control or jurisdiction, even if those activities are outside of their control. The Declaration stresses that all countries, no matter how big or small, should work together to protect and improve the environment. To control, stop, lessen, and get rid of bad effects on the environment caused by activities in different sectors, there needs to be good cooperation through multilateral or bilateral agreements or other appropriate means. This should be done while keeping in mind the sovereignty and interests of all States.

World Charter for Nature

Resolution A/RES/37/7 of the UN General Assembly adopted the "World Charter for Nature" in October 1982. The directive stipulated that all countries, as well as public authorities, international organizations, individuals, groups, and businesses, should work together to protect nature. This could be done through shared activities and relevant actions, such as sharing information and interacting with each other. **Montreal Protocol on Substances that Deplete the Ozone Layer (to the Vienna Convention for the Protection of the Ozone Layer), 1987** The Montreal Protocol, which became effective in 1989, is an important agreement that aims to cut down on the use and production of ozone-depleting substances (ODS). One of the most important new ideas in the Protocol was that not all countries should be treated the same. It recognizes that some countries have done more to harm the ozone layer than others and that their responsibility to cut emissions should depend on how much money and technology they have. As a result, the Protocol sets stricter rules and faster phase-out schedules for countries that contribute more to ozone depletion.

The Rio Declaration 1992

The Rio Declaration on Environment and Development was a short paper made at the 1992 United Nations Conference on Environment and Development, which is also known as the Earth Summit. The Rio Conference happened between June 3 and 14, 1992. Since then, the international community has met twice to look at how well the principles in the documents have been put into action. The Rio Declaration on Environment and Development sought to reaffirm the declaration from the United Nations Conference on the Human Environment, which was adopted in Stockholm in June 1972. The Conference acknowledged that humans are central to sustainable development concerns and are entitled to a healthy and productive life in harmony with nature.

The Paris Agreement 2015

The Paris Agreement (December 2015) stipulated that each country should make its own plans to meet greenhouse gas (GHG) emission reduction targets and share them with the world through its Nationally Determined Contributions (NDCs). The Paris Agreement set up an Enhanced Transparency Framework that says all Parties must send in Biennial Transparency Reports (BTRs) on how they are doing with their Nationally Determined Contributions. Most developed countries have sent in at least one BTR, but the coverage and quality vary a lot, especially in low- and middle-income countries where they still have limited resources. The first Global Stocktake in 2023 showed these gaps by showing that data are often missing, can't be compared across countries, or are late. This hurts accountability and the group's ability to judge progress.

Sustainable Development Goals

Goal No. 13 is about making people more resilient and able to adapt to climate-related disasters. Climate change is speeding up quickly, even though countries around the world have agreed to work together to stop it. According to the WMO Atlas of Mortality and Economic Losses from Weather, Climate, and Water Extremes (1970–2019), there were over 11,000 reported disasters around the world that were caused by climate-

related hazards. These disasters caused over 2 million deaths and US\$ 3.64 trillion in damages. The report also said that most of the deaths were caused by droughts, followed by storms, floods, and very high temperatures.

Distributional and Procedural Injustice Faced by Older Persons

In spite of the normative base of age-inclusive protection found in IHR and environmental frameworks, there are still implementation loopholes. The combination of biological vulnerability, socioeconomic disadvantage, and infrastructural dependence also leads to disproportionate exposure of older persons to environmental harms. The brightest example is heatwaves caused by the climate. The increased mortality in extreme heat events is persistently high among persons aged sixty-five and older, as thermoregulation declines, cardiovascular and respiratory illness are more common, people are socially isolated and homeless, among others, which exacerbates the risk, especially when poverty is the only barrier to access to cooling technology or moving out.

Another distributional injustice dimension is air pollution. Ground-level ozone and fine particulate matter worsen chronic diseases, which affect older age groups, raising hospitalisation and death rates. The events of wildfire smoke and climate-related disasters also bring forth some vulnerability in terms of structure, especially in long-term care facilities, which lack preparedness to attend to emergencies. These failures lead to inquiries as to whether states accord their undertaking of the protective duty over life and health.

These disparities are aggravated by procedural injustice. Environmental governance is growing dependent on digital platforms, but older persons receive inferior access to the internet and digital literacy. Without non-digital options and easily accessible consultation processes, older persons may end up being barred from digital forms of decision-making that directly impact their welfare. Participation is also limited by mobility barriers and social isolation. The compounding nature of these distributional and procedural inequalities indicates that ageing should be inherent in the provision of substantive equality of climate governance and not a peripheral issue.

Accountability and Remedies

Age-inclusive environmental justice will be enforced regarding the availability and utility of accountability systems. Courts are becoming more aware that there is a nexus between environmental degradation and human rights infringement. In *Teitiota v New Zealand*, the Human Rights Committee also recognised that the environmental harm caused under climate change can, in some situations, imply the right to life in cases when states do not take reasonable preventive actions. The reasoning in the case of foreseeable environmental harm created state responsibility under IHR law, although the case involved questions of displacement, rather than ageing.

Similarly, regional human rights courts have also evolved jurisprudence in which environmental protection is interconnected with basic rights. Such changes demonstrate the changing nature of the doctrine where environmental degradation is now no longer considered as a mere regulation issue but can actually lead to binding human rights requirements. The above reasoning applies directly to the vulnerability based on age, especially in cases when the states have clear evidence of the disproportionate health effects in older age groups. There are great challenges to access to justice. The aged individuals might experience financial strains, physical burdens, and evidence that cumbers that hinder a lawsuit. The linkage of climate change and personal health outcomes has proven tricky. The instances of accumulated environmental exposure usually demand the demonstration of direct and immediate harm, which is often challenging to prove in the courts. However, indirect discrimination claims offer a conceptual escape. In cases where neutral climate policies will unfairly disadvantage ageing individuals by not addressing predictable risks, they will be subject to introspection on equality premises by the court. Mechanisms of administration and government human rights institutions are also significant. Age-sensitive, readily available, and affordable procedures for complaints foster accountability.

On the international front, the demand for an advisory opinion by the International Court of Justice on state responsibility to address climate change portrays an increasing sense of responsibility over ageing issues, though the wider exposition of the responsibility may support the argument on vulnerable populations, one of whom is the elderly. The age-based vulnerability could be more clearly incorporated into the judicial reasoning as climate litigation develops.

Towards a Rights-Based Environmental Justice Framework

To address the structural vulnerabilities of the elderly, ageing must be integral to a rights-based framework for climate and environmental governance. Initially, states should employ age-disaggregated data in climate risk evaluation and adaptation strategy formulation. Evidence-based policymaking entails fulfilling commitments concerning the right to health. Without reliable statistics on age-specific death and morbidity, adaptation efforts will have been insufficiently targeted.

Second, heat action plans and outreach efforts to the community should be part of the climate adaptation strategies. Digitally excluded populations should be targeted through various channels of communication to detect them early enough. Important aspects of age-sensitive planning include cooling centres, available transport systems and sturdy healthcare facilities. Such measures are not discretionary policy options but are based on the requirements to safeguard life and health in the IHR law.

Third, procedural structures should guarantee inclusiveness in participation. Non-digital submissions should be made available with environmental consultations, easy-to-reach venues, and outreach to residential care facilities. Democratic legitimacy is strengthened with the recognition of older persons as active participants in climate policy-making, and it is associated with equality standards.

Fourth, there must be coherence in international and domestic policy. States that are members of the ICESCR should not interpret their climate pledges against the pledged right to health. Climate finance mechanisms must focus on ageing population adaptation projects. The inclusion of ageing in world climate discussions would enhance normality and execution.

An environmental justice model that is rights-based, therefore aligns substantive equality, environmental protection and health governance of people. It changes the orientation of collective action in response to welfare into collective action in the fulfilment of rights on the basis of legal obligation.

CONCLUSION

The coherence of international legal frameworks is challenged by climatic inequalities that arise in the face of climate change. The elderly are vulnerable to disproportionate environmental risks due to physiological vulnerabilities, social isolation and the existence of infrastructures. Although this risk can be proven, ageing has not received enough consideration in climate governance in its understanding of vulnerability.

The current IHR law offers a solid normative context of age-inclusive environmental justice. Environmental determinants are covered by the right to health. The equality principles do not allow indirect discrimination. Participation and precaution are asserted in environmental law. A combination of these norms necessitates that states embrace age-sensitive adoption and governance approaches.

Any lack of consideration of ageing as part of climate policy can continue the distributional and procedural injustice. Environmental justice thus requires the clear acknowledgement of older persons as a right holder and worthy of substantive protection. With the ongoing processes of demographic ageing and climate intensification, age-inclusive environmental justice is not just an option but a legal necessity. Enhancing the congruency between human rights and environmental governance will help to increase both normative consistency and effective safeguards of the ageing human societies on a global scale.

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