Depleting Time Itself: The Plight of Today's "Human" Environment

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Abstract. Earth, and its human societies, are seized with the triple crises of climate change, biodiversity loss, and pervasive and escalating levels of pollution. In the 50 years since the 1972 UN Stockholm Conference on the Human Environment (UNCHE), States and UN Environment Program (UNEP) have created an entirely new body of international environmental law, and agreed on the UN Sustainable Development Goals for further socio-economic developments to help the 7.9 billion people on Earth today, and the 1.5 more billion expected soon. The article highlights the accomplishments of the past five decades, launched in Stockholm. However, beyond depleting the resources of Earth's natural and physical environment, humanity has also depleted time itself. There is not enough time left to permit the pace of environment. Fortunately, most nations have recognized the right to the environment, and the UN General Assembly is asked to do so in 2022. At the same time, courts around the world are increasingly enforcing environmental rights. If courts world-wide begin to enforce the right to the environment, pathways to attaining sustainable development can be developed beyond Stockholm+50 (2022).

Keywords: Stockholm Conference, Human Environment, Rio Earth Summit, human population, climate change, biodiversity loss, pollution, right to the environment, making peace with nature, sustainable development goals

1. Introduction

"As we watch the sun go down, evening after evening, through the smog across the poisoned waters of our native earth, we must ask ourselves seriously whether we really wish some future universal historian on another planet to say about us: 'With all their genius and with all their skill, they ran out of foresight and air and food and water and ideas,' or, 'They went on playing politics until their world collapsed around them."' U Thant (1971)¹

"Humanity is waging a war on nature. This is senseless and suicidal. The consequences of our recklessness are already apparent in human suffering, towering economic loses, and accelerating erosion of life on Earth." António Guterres $(2021)^2$

As humans have grown in numbers and migrated across the Earth, they have exhausted natural resources and caused species to become extinct. Human conduct has spread pollution to all corners of the Earth, and disrupted once stable climatic conditions. On the occasion of the 50th anniversary of the 1972 UNCHE, it becomes clear that humans have also exhausted time itself. Depleting reservoirs of time inflicts harm on present and future generations of humans, everywhere. How did this come to be?

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In the five decades since that first UN conference on the environment (UNCHE), governments world-wide have established norms, laws, practices and programs to care for the Earth.³ Nations have agreed, in principle, on a global agenda for cooperating together in their care for Earth's human societies when in 2015, the UN General Assembly integrated "Sustainable adopted seventeen. Development Goals" (SDGs).⁴ Nations have agreed to attain the SDGs by 2030. Goal 13 pledges to stabilize Earth's climate, and scientists of the Intergovernmental Panel on Climate Change (IPCC) estimates that to meet the agreed target of eliminating emissions of greenhouse gases (GHG) by 2050, it will be necessary to cut emissions in half by 2030.⁵ To cope with continuing degradation of biological systems, SDG 15, governments have adopted 10 milestones to attain by 2030, as essential to a goal of "living in harmony with nature" by $2050.^{6}$

On the eve of the 1972 Stockholm Conference, scholars made a clear case for adopting new systems for international cooperation to govern the Earth's shared natural systems.⁷ Conservation leaders, like John Muir, had done so since the end of the 19th century. After the Second World War, ecologists like Aldo Leopold made the case again.⁸ The United Nations system at the outset paid little attention to tending degradation of Earth's environment, and left that sphere in 1948 to the International Union for the Conservation of Nature (IUCN).⁹ Biologist Paul Ehrlich chronicled the impacts from the demand for resources of the growing human population,¹⁰ and while the UN tracked population growth,¹¹ numbers of humans grew from 3 billion in 1960 to 4 billion in 1974, to 6 billion in 1999, and so 7.9 billion persons today. Levels of urban pollution were visibly increasing, and IUCN's Red Data Book shows that increasing numbers of species were becoming extinct. Popular anxiety about the environment was evident world-wide.

On April 22, 1970, a grassroots movement launched the first "Earth Day," and Sweden called upon the United Nations to convene a world-wide conference to conference to address the growing trends in pollution and harm to nature around the world.¹² Ambassador Keith Johnson (Jamaica) chaired the General Assembly's preparatory committee, and UN Secretary General U Thant invited Maurice Strong (Canada) to serve as Secretary-General organizing the event.¹³ UNEP was created, and five decades of intergovernmental negotiations to agree on the framework of principles, multinational environmental agreements (MEAs)¹⁴, the MEA Conferences of the Parties and other deliberative bodies such as the UN Environment Assembly in Nairobi, and institutional stewardship via UNEP and other international organizations.¹⁵ Non-governmental organizations rallied to build support for global environmental initiatives.¹⁶

The pace and scope of environmental law-making during the next five decades is remarkable and historic.¹⁷ It has all been necessary, but is not yet sufficient to safeguard the Earth's natural systems and sustain human socio-economic development. In reflecting on the 50th anniversary (2022) of the Stockholm Conference, it is instructive to probe what the next five decades may bring. Time will tell, but the stakes are high, as UNEP's report Making Peace with Nature (2021) makes clear.¹⁸ How acute are the shortcomings in existing environmental law and what may be needed to cope with the continuing degradation of biodiversity, the expanding negative impacts of climate change, and the growing volumes of pollution and chemical contamination? Lacking a crystal ball, assessing the past may provide a reliable indicator for the future.

2072 will be the centennial of the Stockholm Conference. Looking back from that horizon, the two decades from 2050 to 2072 will probably experience many geopolitical problems arising from the failure to implement the SDGs targets by 2030. The UN estimates that the world's human population will be 9.7 billion persons. The models of the Intergovernmental Panel on Climate Change predict ongoing changes in Earth's hydrologic cycle, with disruptive droughts and floods, and severe weather events.

The global intergovernmental consensus, in principle, is to contain global environmental degradation by 2050, so that governments can sustain socio-economic progress in accord with the SDGs. But the indicators for measuring the steps needed to attain the SDGs indicate many deficits in promised actions.¹⁹ Scientific studies record increases in environmental degradation, in the three interlinked global crises of increasing pollution, expanding biodiversity loss, and strong impacts of climate disruption. Not only is coping with Covid-19 Pandemic problematic, but there is the likelihood of another infectious disease emerging via zoonosis from humans disrupting biodiversity.²⁰ All pre-pandemic estimates about when

governments can attain agreed objectives, such as the SDGs, have been undercut by events. All the while, negative trends in environmental quality continue, often incrementally and unobserved by the general public. The thinning and extinction of species, the accumulation of chemicals, and the rising of sea levels has been what Stewart L. Udall called "The Ouiet Crisis."²¹

2. Trajectory of International Cooperation

The high point of international cooperation since the Stockholm Conference was the 1992 UN Summit on Environment and Development in Rio de Janeiro.²² The adoption of Agenda 21 as a blueprint for steps toward sustainable practices nationally, and the agreement on the norms set forth in the Rio Declaration on principles to guide international conduct, plus the signing of treaties on climate change and biological diversity, provides nations with realistic pathways to cope with growing environmental disruptions. The two decades leading up to the 1992 "Earth Summit" shaped by three signal events: (a) the signing in 1982 of the UN Convention on the Law of the Sea (UNCLOS), providing agreed new environmental norms and codifying international law for the world's oceans,²³ and (b) the UN General Assembly's adoption of the World Charter for Nature in 1982.²⁴ and (3) the deliberations from 1985-87 of the World Commission on Sustainable Development and global dissemination of its report, Our Common *Future* in 1987.²⁵ In those years, diplomats, foreign ministries, and national political leaders, shared a common framework for international cooperation, and agreed on an agenda for the policies that needed to be negotiated and agreed.

In the next decade, that framework unraveled. It had been a challenge, but relatively easy to agree on international policies in comparison with the problems encountered while trying to implement those policies at home, which required major changes in budgets, legislation, building human capacity through education and training, and sustaining the environmental rule of law needed to keep the reforms on track. Virtually all nations made progress on some sectors, but failed in most others. The UN Commission on Sustainable Development, set up in 1992 in Rio under the UN Economic & Social Council (ECOSOC), was to guide and promote best practices in attaining Agenda 21's recommendations, but overtime its annual meetings at UN HQ became disconnected from national decision-making. It lacked the link to the heads of state, and even high-level summit meetings failed to reconnect UN sustainability policy with national implementation. Governments found it too easy to conduct "business as usual." The CSD was discontinued in 2017.²⁶

Twenty years after the Rio "Earth Summit," the UN General Assembly sought to rekindle the spirit of 1992, with a "Rio+20" Summit Conference in June 2012. Negotiators failed to agree on ways to bolster and jump start international cooperation on sustainable development, or "renewing political commitment." The "Outcome document" of the Conference, The Future We Want, provides a routine endorsement of the policies and declarations that had been agreed in past years,²⁷ although modest advances were possible on conservation of biodiversity on the high seas, in areas beyond national jurisdiction. It agreed to end the work of the UN Commission on Sustainable Development, and convene a High-level Political Forum (HLPF) in sustainable development. This Outcome Document served as a place holder, awaiting the time when more productive consultations further, on environmental sustainability could take place.

The UN General Assembly succeeded in advancing the sustainability agenda with the successful negotiations of the UN SDGs. Much of success is attributed to the leadership of Macharia Kamau (Kenya), who co-chaired the negotiations, supported in the UN Secretariat by David O'Connor.²⁸ Much has been written about the SDGs and their historic negotiation.²⁹ The finish line for the race to attain the SDGs is 2030, one decade away.

Environmental Law has been instrumental in the development of sustainable development. The appendix to *Our Common Future* spelled out the legal steps that are appropriate and necessary for governments to attain sustainable objectives. It built an essential foundation under the environmental protection pillar of sustainable development. It defines and prescribes how to abate and prevent pollution, and how to protect natural areas and ecosystems. Environmental law provides the procedures by which the principles of the 1992 Rio Declaration on Environment and Development are observed. The law codified agreed measures for attaining sustainability, such as through the use of

environmental impact assessment (EIA) procedures. Virtually all nations have enacted EIA legislation and its use is required in several treaties and under customary international law. But environmental laws do not create political will, and international law does not yet provide for effective integration of the MEAs or the work of competing UN, global and regional intergovernmental organizations.

How has political will among States and within States, provided for environmental stewardship. As the as yet inconclusive and hesitant support for France's proposed *Global Pact for the Environment* has illustrated, some States retreat into invoking their national sovereignty in order to resist considering new agreements.³⁰ UN Member States resisted invoking the rule of law to help affirm and codify the SDGs.

There are many reasons why reliance on law as a tool for sustainable development is resisted. Corruption fears exposure and legal systems provide for transparency and accountability. When civil strife and armed conflict rage, legal institutions and cannot function. Where laws poverty and socio-economic conditions deny persons the protection and benefits of the law, legal norms and procedure lie dormant. Even constitutional provisions are often not observed until a court or legislature takes action to insist. When laws enjoy widespread acceptance, voluntary compliance is evident. Most people observe norms as customary law, not needing enforcement. So, it is not due to a failure of law that political will does not support sustainable development, either among nations in the UN or within each nation. More than law and legal tools are needed if nations can cope with the gathering environmental crises.

3. The Prognosis

Given the progress of the past 50 years, what is the prognosis for cultivating political will to attain the SDGs? Significant mobilization of public opinion supported past attainments.

The foundations of contemporary international environmental cooperation are rooted in the 1972 United Nations Stockholm Conference on the Human Environment. Sweden took leadership in 1968, initiating ECOSOC's recommendation the UN General Assembly agreed to convene the Conference.³¹ By the end of 1970, UN Secretary General U Thant launched support for a Preparatory Committee for the Conference. Barbara Ward and René Dubos prepared their report, *Only One Earth*,³² concluding that humans were degrading the Earth largely because "The planet is not yet the center of rational loyalty for all mankind... Today, in human society, we can perhaps hope to survive in all our prized diversity provided we can achieve an ultimate loyalty to our single, beautiful, and vulnerable Earth."³³ Through the Preparatory Committee a draft Declaration was prepared, along with proposals for an action plan.³⁴ The Sierra Club and other NGOs sent delegations to Stockholm. Not all States came to Stockholm, but in the General Assembly all States accepted Stockholm.

Preparations for the 1972 Conference were extensive. A youth conference was held in Hamilton, Ontario in 1971, as were four regional governmental meetings on environment and development in Bangkok, Addis Ababa, Mexico City and Beirut. Scientists participated via the International Union for the Conservation of Nature (IUCN) and the International Council of Scientific Unions (ICSU).

National preparations were widespread, for example, major civic organizations like the Sierra Club,³⁵ having been galvanized by the Earth Day events across the United States of America, made submissions and sent delegates to Stockholm. The United States Secretary of State William P. Rogers convened an Advisory Committee for the Conference, chaired by Senator Howard H. Baker, which brought together citizen activists, corporate leaders and governmental leaders such as Ambassador George H.W. Bush and Governor Jimmy Carter of Georgia.³⁶ An inter-agency task force submitted proposals for action, the US Environmental Protection Agency only began its work in December of 1970, as a new agency.

The host nation, Sweden, presented a national report prepared by its Ministries of Foreign Affairs and of Agriculture.³⁷ Like most nations, it did not vet have an environment ministry. Sweden's Environmental Protection Act was adopted in July of 1969. Its report noted the relevant environmental statutes,³⁸ and the administrative agencies and finance and research needed to protect the environment. Prime Minister Olaf Palme, and the President of the National Committee for the Conference, Tage Erlander, submitted proposals for human settlements, pollution control, the rational

management of natural resources, and a suite of international measures for the Conference to consider adopting.

Most national preparations for Stockholm's Conference were similar, involving diplomats with a host of governmental and non-governmental authorities with whom they had previously had scant reason to get to know. The pattern of public consultation and NGO involvement became a standard for environmental and sustainability negotiations. The environment was not only a new topic of the United Nations (not included expressly in the Charter), but was a new priority for most nations as well. The theme of the 1972 Conference was Only One Earth.³⁹ The Report of the Conference set the stage for environmental negotiations for the next five decades.⁴⁰ The UN General Assembly accepted the Conference report, including adopting the Stockholm Declaration on the Human Environment.⁴¹ It also designated June 5th as World Environment Day.

In essence, the Stockholm Conference set in motion three dimensions for international cooperation. First it agreed on general principles of law and policy in the Stockholm Declaration, including restating customary international law in principle 21 on the duty of States not to harm each other's environment or the areas beyond national jurisdiction. Second, it agreed on an action plan that included study of the threat to Earth's environment. and on cooperation to build national capacity to cope with those threats. Third, it established an institutional capacity to foster cooperation through the United Nations creating Environment Programme (UNEP), whose headquarters were established in Nairobi, Kenya, the first (and still only) UN body to be headquartered in the global south.

All States proceeded to build their capacity to address environmental issues. By 1980, IUCN had formulated the *World Conservation Strategy*, which introduced the concept of sustainable development for the first time.⁴² In 1982 The duty of all States to protect the oceans was incorporated into the UN Convention on the Law of the Sea.⁴³ By 1983, when research reports of continuing environmental degradation had alarmed the UNEP Governing Board and a number of UN member states, the UN General Assembly decided to convene a World Commission on Environment and Development (WCED).⁴⁴ The growing awareness fostered momentum to act.

The WCED, chaired by Norway's Prime Minister Gro Harlem Brundtland, and administered by James McNeill of Canada, represented each region of the world and held hearings in each region of the world. All stakeholders were invited to present their assessments of environmental conditions. The process was akin to that leading up to the Stockholm Conference. The WCSD Report. widelv disseminated as Our Common Future in 1987, further galvanized international action.45 It documented the acceleration of environmental degradation trends, and advocated action to merge environmental aims and socio-economic development aims. The WCSD called for States to cooperate to develop the new policies and laws and could sustain a wholesome practices that environment for people and all of life. The Commission was unanimous that "the security, the well-being and the very survival of the planet depends on such changes, now."46 As a result of this report, the UN General Assembly convened the UN Summit on Sustainable Development, popularly termed the Earth Summit, in Rio de Janeiro in 1992.

The Rio Conference was a direct descendent of the Stockholm Conference. Having chaired the final negotiating sessions for the UN Convention on the Law of the Sea, Singapore's Ambassador Tommy Koh, a law professor, was seasoned in the ways of multilateral diplomacy. His selection to chair the Preparatory Committee for the UNCED, and ultimately to chair UNCED itself, was invaluable. Even more so than at Stockholm, heads of state and all stakeholders from all across the Earth converged on Rio, the largest Summit meeting ever.

The agreements of Rio were enormous. Agenda 21, a blue print for national action, guided by the Rio Declaration on Environment and Development, and two new treaties on climate change and biodiversity. Nations had taken on a significant set of new obligations about integrating environment and development. Ten years after Rio, at the Johannesburg Summit on Sustainable Development (WSSD), States saw their way to mesh environmental protection with economic and social pillars of sustainable development in a Declaration Development.47 on Sustainable Governments acknowledged that without environmental protection, socio-economic development would be jeopardized. Beyond that recognition, however, there was not the widespread public participation that Stockholm and Rio had experienced. Implementing recommendations for sustainable development in many sectors left little capacity to integrate or work across sectors. The very success of Rio reinforced fragmentation and disaggregated public participation. This undercut the pressure on governments for action, and countervailing priorities competed for time and budgets in capitols. By the time Rio+20 emerged, political will to take on new tasks, or even agree on new principles, was weak.

The consensus in 2015 with accepting the SDGs as interdependent and a holistic mission for sustainability inspired a popular movement to consolidate and build political will for implementing the SGDs. The popular endorsements of the SDGs, however, have had to overcome four countervailing forces. First, Goal 13 expressly reserved action on climate disruption to the Conference of the Partiers of the UN Framework Convention on Climate Change. Action on SDG 13 is seen to be outside the realm of other SDGs. National governments have not coalesced around, or even agreed upon, shared priorities under the UNFCCC and COP 21 with hard-won Paris Agreement in 2015. Second, scientific warnings from the Intergovernmental Panel on Climate Change have alarmed the public, and many politicians, but economies remain closely dependent on fossil fuels. Pathways to deep decarbonization of the energy systems will take decades, while climate change impacts escalate, undermining progress on other SDGs. Third, SDG 16 and 17 contemplate fostering peaceful conditions with stable legal systems, but domestic armed conflict persists in many parts of the world. The migration of populations, fleeing unsustainable homeland, create human rights crises and unrest. Fourth, the COVID-19 Pandemic has disrupted health systems and economies, leaving little capacity to use the SDGs as a guide for "rebuilding better" as the World Bank and International Monetary Fund urged.⁴⁸

Realistically, time will tell, but the headwinds area strong against attaining the SDGs, or the greenhouse gas reductions sought by 2030. National commitments to abate pollution remain insufficient. Business as usual prevails, as it has for the past ten decades. The goals of preserving natural areas for wildlife may be more attainable, but safeguarding 30% of the planet is not sufficient to end the vast extinctions. Time is not on the side of humans, and this deficit underscores U Thant's concern that humans will "play politics" until their energy and waste systems cause their communities to collapse around them. It is happening already, in what António Guterres accurately calls our human "war on nature."

4. Future Pathway

It took five decades to attain shared knowledge across all nations about the environmental, plight of human life on Earth, and to frame agreed remedies under the SDGs and the Paris Agreement and Biodiversity Convention. Is there enough time to implement remedial measures? Certainly not with "business as usual."

There are, however, two fundamental legal means that can be deployed to end "business as usual" and make a pollution-free, circular economy, with energy systems no longer dependent on fossil fuels. The first is the right to a healthy environment, adopted on October 08, 2021 (resolution 48/13), which the UN General Assembly will consider in 2022 on referral from the Human Rights Council in Geneva.49 Most national already have recognized the right to the environment in their national constitutions or legal systems.⁵⁰ Civic groups around the world actively support recognizing the right internationally. Recognizing this right confirms the provisions of 1972 Stockholm Declaration that all people have the right to a life of quality that sustains their dignity and health. The emergence of a single human right to the environment can restore the central focus to safeguarding the Earth, across all sectors. Conduct to the contrary, as common in "business as usual", violates this right. Whether it is "ecological civilization" in China⁵¹ or Bhutan's "gross national happiness" norms,⁵² or the South American principle of *in dubio pro natura*,⁵³ there are ample examples of policies in most nations that can be invoked to implement the right to the environment.

The second legal means is the expanding capacity of the judiciary to apply and enforce the right to the environment. Recent decisions in Pakistan and The Netherlands apply the principle *in dubio pro natura*.⁵⁴ IUCN with UNEP have established a Judicial Institute on the Environment, to foster continuing judicial legal education and exchange of jurisprudence about environmental law, and rights, procedures and remedies.⁵⁵ A European Forum of Judges on the Environment provides a professional forum for courts across Europe. The Courts in India and across South Asia have long applied constitutional environmental rights through adjudicating public interest litigation (PIL)⁵⁶ cases. The Philippine courts have designed effective remedies in PIL cases. In nations as diverse as Brazil, South Africa, Costa Rica, Indonesia, and the Scandinavian countries, a body of environmental jurisprudence is building. China has established the world's largest national system of environmental judges and court, with the promise of innovations in enforcing environmental duties.

What remains is for courts to apply the right to the environment in *all* their adjudications, as they would apply due process of law. The Environment Right is fundamental. If the public can secure environmental justice in the courts, judicial remedies can arrest the on-going degradation of nature. Regression by governments from agreed norms, such those in the SDGs, can be limited or reversed by focused judicial decisions. Courts at all levels can apply remedies to abate incremental and accumulating "small" incidents of pollution or land degradation. Courts, in short, can end "business as usual" when practices affront the right to the environment.

5. Conclusion

Environmental Law cannot create political will to implement the SDGs in a robust way, but it has provided the framework for judicial decision-making that takes the SDGs seriously. The public can invoke its environmental rights. In doing so, their actions can mobilize public sentiment and build anew the political will that nations experienced in 1972 in Stockholm.

Judicial decisions in national courts can be transformative, as was Philippine Supreme Court Justice Hilario Davide, Jr.'s decision in Oposa v. Factoran,⁵⁷ first acknowledging the rights of future generations. The many rulings acknowledging the right to a healthy environment are reflected in the UN General Assembly's forthcoming consideration in autumn of 2022 of the Human Right to the Environment. It is logical, and, as Prof. Bharat Desai and others have explained,⁵⁸ entirely possible within the framework of the UN Charter, for UN Member States to fulfill their responsibilities under this universal right to the healthy environment by reconceiving the Trusteeship Council as a fiduciary for future generations and the well- being of Earth itself. Such multinational cooperation could be an outcome from the cumulative changes in norms and a new political will emerging within States as a result of public interest litigation. As governments realize that they have depleted the reservoirs of time left before suffering irrevocable harm, it is imperative that they energize international environmental law.

As the scientific assessments make clear, human societies do not have another 50 years to replace "business as usual" with sustainable practices and policies. Invoking the right to the environment before courts in all region of the world, can provide the action locally that sovereign States have failed to produce globally. As René Dubos advocated in Stockholm, it is time to "Think globally and act locally." In 2022, time is no longer in supply, as it seemed to be in 1972. It is now well past time to invoke the right to the environment, before it is too late.

Endnotes

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