

DEALING WITH THE EMERGING TRIPLE PLANETARY CRISES: THE IMPERATIVE OF EFFECTIVE LEGAL RESPONSE*

Abstract

The triple planetary crises of climate change, biodiversity loss, and pollution have emerged as significant threats to the global environment. Their interconnected challenges pose grave and unprecedented danger to the ecological balance, global stability and the whole gamut of human rights, necessitating immediate and comprehensive action. Addressing these intertwined crises requires, among others, effective and coordinated legal intervention at international, domestic and corporate levels. Available legal frameworks relating to environmental protection are rather inadequate, often fragmented and inefficiently enforced. Current international treaties, national regulations, and their implementation mechanisms have not been able to catch up with the speed and rate of environmental degradation driven by anthropogenic activities across the globe. The emerging triple planetary crises are beyond the contemplation of the existing legal instruments which now lack the necessary integration and enforcement to effectively mitigate them. This paper therefore, seeks to identify, and understand how law can evolve and be restructured to provide more robust solutions. It analyses major international treaties and agreements like the New Paris Agreement and Convention on Biodiversity, national and local legislations regarding environmental protection. It further explores the imperative of corporate environmental responsibility, stressing the exigency of stringent legal standards and enforcement procedures. The paper concludes that a holistic and cohesive legal response is crucial to navigate the complexities of the triple planetary crises. It recommends enhanced international cooperation, stronger corporate accountability, careful integration of scientific insights into legal processes, and adoption of right-based strategies, to drive transformative change in the campaign for healthy and sustainable environment.

Keywords: Dealing, Planetary Crises, Triple, Effective, Legal Response

1. Introduction

The international community today grapples with an unprecedented convergence of three critical and interlinked environmental challenges involving climate change, biological diversity loss and pollution. These intertwined crises, collectively described as ‘triple planetary crises’ pose huge threats to the ecological balance, the health and rights of human populations, as well as the development and sustainability of the global economy. Each of these crises has its own causes and effects which must needs be resolved severally to secure a viable future for our planet¹. Climate change manifests in rising global temperatures, increasingly acute weather events, and shifts in climatic patterns, all of which result in the disruption of both natural and human systems. Climate change simply describes the long-term drifts in temperatures and weather patterns that ultimately result in complete alteration of the ecosystems that support life on the planet². Biodiversity loss results from habitat destruction, overexploitation, and other anthropogenic activities that abrade the complex network of life that supports the ecosystems and general well-being of the human populations. At the same time, pollution, in its myriad forms, contaminates the water, soil and air, resulting in environmental degradation and deleterious health consequences. Pollution is brought about by everything from traffic and factories to wildfires, and volcanoes³. Addressing these triple crises requires a multifaceted approach, of which effective legal intervention plays a vital role. The urgency, enormity and complexity of these environmental challenges demand robust legal responses that can effectively mitigate their impacts and promote long-term resilience and adaptation. The Law as a foundational tool that shapes human behaviours, can be deployed to regulate activities that impact on our environment. International environmental law has been instrumental in providing a cooperative framework for nations to address these common global environmental challenges⁴. Treaties and Agreements like the Paris Agreement on Climate Change, the Convention on Biological Diversity, and the Basel Convention on Hazardous Wastes represent efforts to promoting collaborative action. Yet, the implementation and enforcement of these agreements often face challenges,⁵ largely due to divergent national interests, economic disparities, and political will. Effective legal responses at the national level require the integration of environmental considerations into every sector of governance⁶. This includes the adoption of comprehensive environmental protection regulations, setting up viable regulatory agencies with adequate enforcement powers, and promotion of public participation in environmental decision-making.⁷ Moreover, the law in the national level must prioritize key strategies particularly in the area of resilience and adaptation, to effectively tackle the intertwined environmental crises and their impacts.

*By **Ferdinand Onwe AGAMA, LLB, BL, LLM, PhD**, Department of Public Law, Faculty of Law, National Open University of Nigeria, Plot 91 Cadastral Zone Nnamdi Azikiwe Expressway, Jabi Abuja. ferdinandagama0@gmail.com, Tel: 08039368014

¹ United Nations Climate Change, ‘What is the Tripple Planetary Crises?’ (2022) < <https://unfccc.int/news/what-is-the-triple-planetary-crisis>>. Accessed on 29 April, 2025.

² *Ibid*.

³ *Ibid*.

⁴ UN Environment Programme, ‘How Multilateral Environmental Agreements can Help mend the Planet’ (2023) <https://www.unep.org/news-and-stories/story/how-multilateral-environmental-agreements-can-help-mend-planet>. Accessed on 3 May, 2025; J. A. R. Nafziger, Basic Principles and Functions of International Environmental Law in the Context of Managing Water Resources, (2011) *Denver Journal of International Law & Policy*, Vol.39.

⁵ B Heid, L Marquez-Ramos, International Environmental Agreements and Imperfect Enforcement: Evidence from CITES’ (2023) *Journal of Environmental Economics and Management*, Vol. 118.

⁶ P Kameri-Mbote, B Pisupati, A Smagadi, A Meso, H Sung and A Gachie, ‘The Role of Environmental Law and Governance in Transformational Change to Address the Triple Planetary Crisis’ (2023) *Law, Environment and Development (LEAD) Journal*, Vol.19

⁷ S A Odey, ‘Environmental Law Enforcement in Nigeria: Re-Evaluation’ (2023), *Jurnal Ilmu Sosiologi Dialektika Kontemporer* Vol. 11, No. 1.

2. Understanding the Triple Planetary Crises

Triple planetary crises refer to the three major interconnected environmental issues in the form of climate change, pollution and biodiversity loss, which currently confront the global community⁸. Securing and ensuring a viable, healthy and sustainable environment for the present and future generations requires a comprehensive understanding of, and coordinated response to the causes and effects of each of these crises. Climate change is the most pressing challenge facing humankind today⁹. It simply refers to the persisted shifts in temperatures and weather patterns that in the long run, disrupt the ecosystems that support life on the planet. Although these shifts are basically natural, as a result of changes in the activity of the sun or due to large volcanic eruptions¹⁰, climate change today, is driven mainly by anthropogenic activities¹¹. Such activities and their influence have warmed the atmosphere, ocean and land occasioning large-scale changes in the cryosphere, atmosphere, ocean, and biosphere¹². Heats resulting from combustion or burning of fossil fuels like coal, oil and gas have also, affected the global temperatures. Virtually everything man does releases emissions, especially use of energy, industry, transport, buildings and agriculture that generates and releases greenhouse gases to the atmosphere. These greenhouse gas emissions act like a blanket wrapped around the Earth, trapping the sun's heat and raising temperatures¹³. Anthropogenic activities have been the primary cause of global warming since 1950¹⁴. The world is already experiencing the bad effects of climate change in the form of 'increased intensity and severity of droughts, water scarcity, wildfires, rising sea levels, flooding, melting polar ice, catastrophic storms and declining biodiversity'¹⁵.

Biodiversity loss on its own refers to the complete disappearance of plant or animal specie from the Earth, or a decline in biological diversity within a given area. It also refers to the reduction of any aspect of biological diversity (i.e., diversity at the genetic, species and ecosystem levels) in a particular area through death, destruction or manual removal.¹⁶ Simply put, it means the decline or disappearance of biological diversity, such as animals, plants and ecosystems. This biodiversity loss is also caused by man's various incautious activities including overfishing, deforestation and desertification as a result of climate change¹⁷. Biodiversity loss and climate change are inextricably related. While climate change is the primary driver of biodiversity loss, the former also, depends on the latter as part of the solution¹⁸. Biodiversity is the baseline for everything on earth, connecting every life and being together. Its loss therefore, impacts everything and without it, our planet has no future.

Pollution refers to the introduction of substances or energy that give rise to adverse changes in the environment and living entities. In other words, it is the contamination of the natural environments and living entities through the introduction of harmful chemical substances.¹⁹ Pollution has also been defined as 'any substances in water, soil, or air that degrade the natural quality of the environment, offend the senses of sight, taste, or smell, or cause a health hazard. The usefulness of the natural resource is usually impaired by the presence of pollutants and contaminants'²⁰. Meanwhile, the United Nations states that pollution is the "presence of substances and heat in environmental media (air, water, land) whose nature, location, or quantity produces undesirable environmental effects."²¹ Pollution is not only caused by particulate matters like smoke and dust, but can also be in the form of energy such as sound, heat or light. Pollution, even in minuscule quantities, affects the ecological balance. In the polluted environment, pollutants can make their way up the food chain and ultimately find their way into our body system. Pollution can occur naturally through volcanic eruptions which, when they happen, release large quantities of harmful gases such as carbon dioxide into the atmosphere. Large concentrations of volcanic gases in the atmosphere contribute to climate change. Wildfires are another source of natural pollution and occur through lightning strikes. Smoke from wildfire contains sizeable quantities of both carbon dioxide and carbon monoxide, which can cause suffocation. Besides, the larger part of pollution threatening the world environment today is generated through human activities.²² This comes primarily from stationary pollution sources such as 'chemical plants, coal-fired power plants, oil refineries,²³ petrochemical plants, nuclear wastes disposal activity, incinerators, large livestock farms, polyvinyl chloride (PVC) factories, metals production factories, plastics factories, and other heavy industry. The global environments are being increasingly polluted today as a result of

⁸United Nations Climate Change, (n3).

⁹*Ibid*.

¹⁰United Nations, 'What is Climate Change?' <<https://www.un.org/en/climatechange/what-is-climate-change>>. Accessed on 5 March, 2025.

¹¹A Singer, *Intergovernmental Panel on Climate Change*, (IPCC, Switzerland; 2021). <https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM_final.pdf>. Accessed on 7 March, 2025.

¹²*Ibid*.

¹³United Nations, 'What is Climate Change?' (n11).

¹⁴The Intergovernmental Panel on Climate Change (IPCC), 'Climate Change 2007: Impacts, Adaptation and Vulnerability' (2007). <https://www.ipcc.ch/site/assets/uploads/2018/03/ar4_wg2_full_report.pdf>. Accessed on 26 April, 2025.

¹⁵*Ibid*.

¹⁶Glossary: Biodiversity loss. Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES). Accessed on 5 August, 2024.

¹⁷United Nations, 'What is Climate Change?' (n14).

¹⁸E Mrema, cited in United Nations, 'Biodiversity: Our Strongest Natural Defence Against Climate Change' (2022). <https://www.un.org/en/climatechange/science/climate-issues/biodiversity>.. accessed on 26 April, 2025.

¹⁹Merriam-Webster.com Dictionary, Merriam-Webster, <https://www.merriam-webster.com/dictionary/pollution>. Accessed on 26 April, 2025.

²⁰The United States Environmental Protection Agency, <<https://blog.istc.illinois.edu/2023/08/29/what-is-pollution-prevention/>>. Accessed on 6 February, 2025.

²¹UN data Source: Environment Glossary, <http://data.un.org/Glossary.aspx?q=pollution#:~:text=UNdata%20source:%20Environment%20Glossary%20%7C%20United,activity%20that%20generates%20pollutants..> Accessed on 6 May, 2025.

²²UK Health Alliance on Climate Change, 'Pollution Caused by Human Activities' (no date). <https://ukhealthalliance.org/influencing-policy/biodiversity-climate-change-and-health/pollution-caused-by-human-activities/>. Accessed on 21 May, 2025.

²³M R Beychok, *Aqueous Wastes from Petroleum and Petrochemical Plants* (1st ed., John Wiley and Sons 1967).

industrial and developmental operations. The levels of anthropogenic chemical pollution have already exceeded planetary boundaries and now pose significant threat to the entire ecosystems.²⁴

With regard to the above planetary crises and in reference to how human consumption and production systems are negatively impacting the environment, the United Nation's Secretary-General *Antonio Guterres* warned that 'Humanity is waging war on nature. This is senseless and suicidal'²⁵. He submitted that 'the consequences of our recklessness are already apparent in human suffering, towering economic losses and the accelerating erosion of life on Earth'.

3. Impacts of the Triple Planetary Crises on Humans, Environment and Economy

It is trite to state that the emerging planetary crises currently pose an existential threat to the entire human race, looming large than all other world's challenges²⁶. Although, each of these interlinked problems of climate change, biodiversity loss and pollution is distinct in terms of their causes and effects, they in essence, 'converge and feed on each other, having profound effect on human rights, health and the entire ecosystems'²⁷. According to the Intergovernmental Panel on Climate Change 2023, the triple planetary crises are presently occurring at an unprecedented rate because of human activities, such as the burning of fossil fuels and deforestation. This has led to the increase in the risks of flooding, prolonged droughts, heatwaves, more frequent and very severe weather events and other devastating crises across the world. The deepening planetary crises is leading an escalating threat to all life on the planet,²⁸ while already taking its heavy toll, not only on human rights and health, but also on the world environments and economic prospects. The whole range of human rights is being seriously impacted negatively, resulting from anthropogenic processes. An UN expert has in line with this understanding, warned that 'human-induced climate change is the largest, most pervasive threat to the natural environment and societies the world has ever experienced...'²⁹ The consequential crises are adversely impacting human rights³⁰ globally. Study reveals that, more than 80 percent of people living in urban areas 'are exposed to air quality levels exceeding World Health Organisation limits, increasing their risk of lung cancer and other life-threatening disease'³¹. Air pollution, being one of the greatest environmental health risks, is affecting every region of the world as the greater percentage of the world population does not meet WHO air quality guidelines.

There is also, serious interplay between these crises and the natural environment. Climate change and pollution for instance, degrade the environment and affect the global economy. Flooding and runoff can contaminate water and result in water pollution. Drought can disrupt water, food, and human health. The pollution of water bodies can cause harm to the atmosphere and impede the growth of plants and algae. The severe and more frequent floods, droughts, storms as witnessed in different parts of the world today engender, not only human loss, but an enormous environmental and economic disruptions³². Pollution and overexploitation of natural resources can cause environmental degradation and ultimately result in severe, pervasive and perhaps irreversible changes for people, assets, economies and ecosystems all over the world.³³ Climate change and pollution have some negative socio-economic consequences including an increase in violent crime³⁴, poor school performance for children³⁵ and decrease in productivity of both indoor and outdoor workers³⁶. Study shows that, pollutants often have outsized impacts on significant part of the world populations, especially the marginalised and vulnerable groups like children, the elderly and indigenous peoples around whose neighbourhood polluting industries and toxic waste are often sited³⁷. Such outsized impact is the major reason for the clamour for, and creation of the so-called eco-justice, or environmental justice movement³⁸

²⁴P Linn *et al*, 'Outside the Safe Operating Space of the Planetary Boundaries for Novel Entities' (2022) *Environmental Science and Technology*, 55, 3.

²⁵ United Nations Environment Programme (UNEP), 'Making Peace with Nature' (2021). <https://www.unep.org/resources/making-peace-nature>. Accessed on 21 May, 2025.

²⁶A Guterres, 'Climate Change: An 'Existential Threat' to Humanity, UN Chief Warns Global Summit' (May, 2018). <https://news.un.org/en/story/2018/05/1009782>. Accessed on 21 May, 2025.

²⁷L Y Estrada, 'The Triple Planetary Crisis: What is it and what can we do about it?' (2024). <https://aida-americas.org/en/blog/triple-planetary-crisis-what-is-it-and-what-can-we-do-about-it>. Accessed on 28 April, 2025.

²⁸E Bodin, C Charveriat, O Rowe and A Massazza, 'The Impact of the Triple Planetary Crisis on Mental health in Low and Middle-Income Countries', (2024). < <https://unitedgmh.org/app/uploads/2024/03/Climate-environment-MH-FINAL-24-11-23.pdf>>. Accessed on 29 April, 2025.

²⁹A UN Expert, 'Climate Change the Greatest Threat the World has ever Face, UN Expert Warns' (October, 2022). <https://www.ohchr.org/en/press-releases/2022/10/climate-change-greatest-threat-world-has-ever-faced-un-expert-warns>. Accessed on 29 April, 2025.

³⁰included are the right to life, health, food, development, self-determination, water and sanitation, work, adequate housing and sustainable environment.

³¹Institution of Mechanical Engineers, '80% of people living in urban areas are exposed to harmful pollution' (May, 2016). <https://www.imeche.org/news/news-article/80-of-people-living-in-urban-areas-are-exposed-to-harmful-pollution>. Accessed on 7 May, 2025.

³²United Nations Climate Change, (n8)

³³'Climate change and environmental degradation', (2022). < https://knowledge4policy.ec.europa.eu/climate-change-environmental-degradation_en>. Accessed on 7 May, 2025

³⁴H Evan, H Anthony, M Erich and S Soodeh, 'Air Pollution and Criminal Activity: Microgeographic Evidence from Chicago' (2021) *American Economic Journal: Applied Economics*. 13 (4): 70–100.

³⁵H Jennifer, P Claudia and S David, 'Does Pollution Drive Achievement? The Effect of Traffic Pollution on Academic Performance' (2019) *National Bureau of Economic Research. Working Paper Series*. doi:10.3386.

³⁶S Alberto, L Haoming and H Jiaxiu, 'Severe Air Pollution and Labor Productivity: Evidence from Industrial Towns in China' (2019) *American Economic Journal: Applied Economics*. 11 (1): 173–201

³⁷J Erickson, 'Targeting Minority, Low-Income Neighbourhoods for Hazardous Waste Sites' (2016) *University of Michigan News*.

³⁸S David, *Defining Environmental Justice: Theories, Movements, and Nature* (Oxford University Press 2007).

Greenhouse gas emissions are altering the world's climate, causing a human rights catastrophe, and other climate change related disasters on the environment and economy. Devising and adopting effective legal responses constitute a crucial aspect of climate actions required at present, to bend the emissions curve in the entire efforts to salvage our planet.

4. The Concept of Eco-Justice in the Wake of Triple Planetary Crises

Eco-justice otherwise known as environmental justice 'is a social movement to address environmental injustice, which occurs when poor or marginalized communities are harmed by hazardous waste, resource extraction, and other land uses from which they do not benefit'³⁹. The concept of environmental justice preaches equal and equitable right of environmental protections and benefits for everybody, regardless of colour, race, national origin, or income level, as well as meaningful participation in the policies that shape their communities.⁴⁰ The concept is about justice and accountability in environmental issues, with regard to the 'protection and fulfilment of environmental rights, and promotion of the environmental rule of law'⁴¹. The United States Environmental Protection Agency considers environmental justice as 'the fair treatment and meaningful involvement of all people regardless of race, colour, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations and policies'. Fair treatment implies that no segment of the society, including racial, ethnic, socio-economic groups or indigenous people should bear a disproportionate share of the impacts of environmental degradation occasioned by industrial, and commercial operations or the execution of governments' programmes and policies⁴². It is distributive and procedural justice in the sense that it encourages both the equitable distribution of environmental risks and benefits, as well as fair and meaningful involvement in decision-making that affect the environment⁴³.

Deep ecology considers human life as just one of many equal constituents of a global ecosystem. The deepening triple planetary crises have increased the concern regarding the state and future of the global environment and the overall well-being of humanity. The present socio economic, health and environmental damage resulting from these crises demands the consideration of eco-justice as a paradigm and means to advance environmental preservation⁴⁴. In the wake of these planetary crises, eco justice has become an important part of the general efforts to improving and maintaining a healthy and sustainable environment, not only for the vulnerable and marginalised populations, but for the entire humankind. Tackling these crises involves varied actions, encompasses different ideas but targets one general goal– to secure a viable and healthful environment for the present and future generations. Eco justice as a concept is one of the many ways of addressing the current international environmental challenges. Its primary focus is to address the environment-related injustices suffered by the weak, poor, vulnerable and marginalised groups around the world. It is an integrated and collaborative effort that promotes environmental rule of law, human rights and environmental governance. The concept is so relevant today, not only because, the deepening triple planetary crises exacerbate the already poor state of the global environment, but it fosters the formation of proper legal frameworks and regulation of all operations that are harmful to the environment. The emerging planetary crises are a fallout of the long-term human actions and inhuman inactions⁴⁵, for which the concept of environmental justice seeks to provide regulatory measures. The concept accordingly, constitutes one of the key components of the response to the triple planetary challenges bedevilling the global environment.

5. The Need for Effective Legal Frameworks and Policies for Climate Action

Climate action also known as 'climate change action' refers to a range of activities, measures, mechanisms as well as policy instruments set up, to mitigate human-induced climate change and its negative effects. Climate action is the central demand of the global social movement known as 'climate movement'⁴⁶. It addresses the urgent call to take collective and holistic actions to combat climate change, one of the intertwined crises confronting humanity. For a commensurate response to the threat posed by the current planetary crises, the establishment and careful implementation of effective, robust and up to date legal frameworks and policies at the local, national and international levels are of paramount importance. While policy goals can play role in mapping out the agenda for the planetary crises actions and solutions, legal frameworks will create binding rules and accountability mechanisms for implementation and expected outcomes. The law creates the institutions that shoulder the responsibility of enforcing and implementing the rules, and empower people to seek redress in the event of environmental activity in violation of these frameworks. This means a change of perspective with regard to planetary or environmental matters, 'from policy promises which have low accountability, to identified duty bearers and rights holders with greater legal certainty and accountability'⁴⁷. The creation and effective implementation of legal frameworks constitute a key element, not only for the

³⁹S Julie, L K Jonathan, 'Environmental Justice at the Crossroads' (2008) *Sociology Compass*. 2 (4): 1331–1354

⁴⁰R Skelton, 'The Environmental Justice Movement' (2022). <<https://www.nrdc.org/stories/environmental-justice-movement>>. Accessed on 9 May, 2025.

⁴¹ UNDP, 'Environmental Justice: Securing our Right to a Clean, Healthy and Sustainable Environment' (2022). <https://www.undp.org/sites/g/files/zskgke326/files/2022-06/Justice-Environmental%20Tech%20Report%2001%5B36%5D_0.pdf>. Accessed on 9 May, 2025.

⁴²'Environmental Justice-Related Terms As Defined Across the PSC Agencies' (May, 2013) *U.S EPA*. <https://www.epa.gov/sites/default/files/2015-02/documents/team-ej-lexicon.pdf>. Accessed on 9 May, 2025.

⁴³S David, *Moral and Political Reasoning in Environmental Practice*. Cambridge, Massachusetts (The MIT Press, 2002) p. 79.

⁴⁴S Chandramohan, R Bhagwan, 'Towards an Understanding of Eco Justice and its related Principles and Interventions that can Advance Environmental Justice' (2023) *Southern African Journal of Environmental Education*, Vol. 39.

⁴⁵M Bachelet, 'UN High Commissioner for Human Rights, statement at the 48th session of the Human Rights Council', (September 2021), cited in UNDP, 'Environmental Justice: Securing our Right to a Clean, Healthy and Sustainable Environment' (n41).

⁴⁶M Julie, 'Fridays for Future: A Look into A Climate Change Movement' (2021). <https://storymaps.arcgis.com/stories/3947ec5373864c6ea361190220f0e27c>. Accessed on 15 May, 2025.

⁴⁷M Bachelet. (n46).

environmental rule of law, but also in mitigating the increasing adverse effects of climate change, biodiversity loss and pollution. This will be possible by holding ‘all entities equally accountable to publicly promulgated, independently adjudicated laws that are consistent with international norms and standards for sustaining the planet’.⁴⁸ Comprehensive climate legal frameworks and policies have the potential to drive more ambitious climate change action⁴⁹. National laws that address multiple aspects or areas of climate change mitigation and/or adaptation are already in place, sharing similar features such as ‘legally binding greenhouse gas (GHG) emission reduction targets, GHG emission budgets, review systems and independent institutions to support decision making’⁵⁰. Still, there is a need for more countries to include in their national legislations a ‘Net-Zero’ GHG emissions target, taking a cue from those have that adopted such policy⁵¹.

Laws and policies ensure equitable and sustainable management of the environment through regulation and creation of guidelines for activities that are harming the international climate and the entire ecosystem. Legal frameworks for climate action are a way of responding to the deepening planetary crises. This will set the standards of operations, including environmental impact assessments for all projects and activities affecting our collective environment⁵². The said frameworks will cater for, and regulate the energy and ‘agriculture, forestry and land use (AFOLU)’ sectors,⁵³ which account to the majority of greenhouse gas (GHG) across the globe. The law should include provisions for setting up how relevant sector stakeholders will facilitate climate change reduction and adaptation, as well as ensure seamless transitions to low carbon and greener economies for adequate protection of the environment and humankind⁵⁴. This will include the more stringent regulation of business and corporation activities that induce climate change and impact adversely on the environments. This has become necessary as operations of corporations often have serious environmental footprint, for example. the ‘one hundred businesses’⁵⁵, known as ‘carbon majors’ are said to be responsible for 71 percent of greenhouse gas (GHG) emissions since 1988⁵⁶.

6. Existing Legal Frameworks on Climate Change

The emerging triple planetary crises and their negative impacts constitute one of the most intriguing issues across the globe today, demanding more robust legal responses, locally, nationally and internationally. One of the major reasons for the deepening planetary crises is the lack or absence of effective laws to regulate the operations and activities that lead to significant change in environmental and climatic conditions⁵⁷. Climate change legislations consist of set of laws and policies that regulate actions on climate change by setting its legal basis. These laws and policies address climate actions in relation to climate change reduction, adaptation and disaster risk management. Such laws and policies may ‘apply across different sectors or focus on one, such as agriculture, land use, transport, energy, waste, environment, tourism, industry, buildings, water and health’⁵⁸.

National Climate Change Laws and Policies

In response to the emerging triple planetary crises, different nations have created legal regimes to address their causes and effects. This is so, as governments around the world set up policies for low-emission and resilient growth and increase climate responses in accordance with the Paris Agreement. Nigeria, in order to protect its environment and ecosystem from the destructive effects of climate change and other planetary crises, and to achieve the reduction of greenhouse gas emissions within its space, the government enacted the Climate Change Law in November 2021⁵⁹. The Act applies to all Ministries, Departments and Agencies (MDAs) of the Federal Government of Nigeria as well as to public and private institutions in the country. The Act is basically to provide the country with a legal framework that enables the achievement of its climate goals through the development and implementation of mechanisms that will foster low carbon emission and secure a sustainable environment in the country⁶⁰. The Act represents a major comprehensive local statute enacted to address the problem of climate change and other related matters in Nigeria. It provides a legal and institutional framework to limit greenhouse gas emissions in accordance with Nigeria's international climate change commitment⁶¹. Its enactment was in line with Nigeria's commitment to the

⁴⁸United Nations Environment Programme, ‘Environmental Rule of Law’ (2019) *First Global Report*, p. 8.

⁴⁹S Eskander and S Fankhauser, ‘Reduction in Greenhouse Gas Emissions from National Climate Legislation’ (2021) *Nature Climate Change* 10, pp. 750–756.

⁵⁰UNDP, ‘Environmental Justice: Securing our Right to a Clean, Healthy and Sustainable Environment’ *n41).

⁵¹K Buchanan, ‘New Law Library Report Lists Countries with Legislation Establishing a ‘Net Zero’ Emissions Target’, (2021) *Library of Congress*.

⁵²*Ibid*.

⁵³F de Andrade Correa and C Voigt, ‘The Paris Agreement and Net-Zero Emissions: What Role for the Land Sector?’ (2020) *Carbon & Climate Law Review*, Volume 15, Issue 1.

⁵⁴The Office of the Special Rapporteur on Human Rights and the Environment is developing new guidelines for human rights-based approaches to recovery, conservation and climate finance, and is working with member States to support a just transition to a sustainable, human rights-based economy.

⁵⁵United Nations General Assembly, ‘Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment’, (2019) A/74/161.

⁵⁶*Ibid*.

⁵⁷A O Kehinde and O Abifarin, ‘Legal Framework for Combating Climate Change in Nigeria’, (2023). < https://www.researchgate.net/publication/370401027_Legal_Framework_for_Combating_Climate_Change_in_Nigeria#full-text>. Accessed on 15 May, 2025.

⁵⁸‘What is Climate Change Legislation?’ (2022). <https://www.lse.ac.uk/granthaminstitute/explainers/what-is-climate-change-legislation/>. Accessed on 16 May, 2025.

⁵⁹The Climate Change Act, 2021.

⁶⁰U Udoma and B Osagie, ‘The Climate Change Act 2021: Key Points for Consideration’ (2023). < <https://uubo.org/wp-content/uploads/2023/01/THE-CLIMATE-CHANGE-ACT-2021-KEY-POINTS-FOR-CONSIDERATION.pdf>>. Accessed on 22 May, 2025.

⁶¹T Akaluzia, ‘The Nigerian climate change act — key highlights’ (2022) *Business Day*. <https://businessday.ng/opinion/article/the-nigerian-climate-change-act-key-highlights/>. Accessed on 25 May, 2025.

international climate change objective, by setting a goal for achieving net-zero greenhouse gas emissions between 2050 and 2070⁶². The overarching objective of achieving net zero emissions came with specific mandate on the Nigerian government to set up a National Climate Change Action Plan and a five-year carbon budget (with quantified annual objectives). Among the notable provisions of the Act are the creation of the National Council on Climate Change, a body empowered to make policies and decisions on all matters relating to climate change in Nigeria⁶³. The law also, mandates private entities with 50 or more employees to put in place measures to achieve the annual carbon emission reduction targets in line with the National Climate Change Action Plan and to designate a Climate Change Officer for reporting on the entity's efforts for this purpose⁶⁴.

The Climate Change Act provides a robust legal framework for climate action to meet Nigeria's short, medium and long-term objectives on climate mitigation and adaptation. As 'the first stand-alone comprehensive climate change law in West Africa and among few globally and regionally'⁶⁵, the Act can be a springboard for promoting climate change activism and a legal foundation for possible climate litigation in Nigeria. It is hoped that the Act will enable Nigeria to achieve a reduction of greenhouse gas and carbon emissions to internationally acceptable levels⁶⁶. This is especially so, as neither the 1999 Constitution nor the National Environmental Standards and Regulations Enforcement Act, 2007⁶⁷, is viable enough to address the present planetary challenges in the country. Nigerians are however, waiting to see how the Climate Change Act would fair in the years ahead, in terms of effective implementation and revolutionization of the greenhouse gasses emission curve in the country.

International Climate Change Legal Frameworks

Climate change is a global challenge that requires joint action from all nations. Several international measures have been adopted to combat this menace through international agreements, protocols, and conventions⁶⁸. The key stages of the international legal frameworks addressing climate change began with the passage of Resolution 1721(XVI) by the United Nations General Assembly in 1961⁶⁹. The resolution created various organizations with mandates to advance scientific research and knowledge on the physical causes of major climate and weather alteration. In 1972, the UN Conference on Human Environment was held in Stockholm, Sweden, which became the first international environmental conference after the creation of the United Nations Environmental Programme (UNEP). The ensuing decade witnessed the First World Climate Conference Declaration spotting climate change as an urgent challenge; the creation of the World Climate Programme, in 1979 and the Convention on Long-Range and Transboundary Air Pollution (CLRTAP) becoming the first internationally legally binding instrument on climate⁷⁰. The Vienna Convention for the Protection of the Ozone Layer and its related protocol (the Montreal Protocol) were adopted and opened for signature in 1985 and 1987 respectively. In 1988, the Intergovernmental Panel on Climate Change (IPCC) was established. The Panel which currently has 195 member states is the primary international authority on the state of scientific, technical and socioeconomic knowledge on climate change as its reports are relied upon in the formulation of climate change policy, laws and legal decisions⁷¹. From the late 1980s to early 1990s, there were several other UNGA resolutions, international declarations, and statements which emphasised on the need for global communal responsibility in tackling climate change and acknowledged that human-induced greenhouse gas emissions (GHGs) are the leading cause of climate change⁷². For instance, the recognition of, and immediate need for institutional and legal actions to the international climate issue was first expressed by world leaders at the Rio Earth Summit in 1992⁷³. The Summit established two additional legally binding conventions including the United Nations Framework Convention on Climate Change (UNFCCC), and the Convention on Biological Diversity, which entered into force in 1994 and 1993 respectively. The UNFCCC, a brainchild of the Earth Summit, was established with the prime objective of fostering international action toward mitigation of greenhouse gas emissions. It aims to 'stabilize greenhouse gas concentrations in the atmosphere at a level that allows ecosystems to adapt naturally to climate change so that food production is not threatened, while enabling economic development to proceed in a sustainable manner'⁷⁴. Its general goal is to prevent every form of anthropogenic interference with the Earth's climate system in order to enable economic development without causing irreversible damage to the ecosystem and human health. To achieve this, the Convention codifies five distinct principles in Article 3, which are legally binding on Parties, to adopt as guiding principles for their domestic implementation of the Convention. Article 3(3) particularly articulates the 'precautionary principle', by stating that notwithstanding any lack of full scientific certainty about certain aspects of climate change, immediate measures to forestall irreversible damage to humans and the ecosystem should prevail as the prime concern. The Kyoto Protocol to the UNFCCC was subsequently adopted in 1997 to introduce more stringent legally binding greenhouse gas emission reduction targets and timelines, which the United Nations Framework Convention lacked. The Kyoto Protocol entered into force in 2005 and currently has 192 Parties. It provides specific commitments for different categories of State Parties depending on their peculiarities, 'with a view to encouraging Parties to develop national actions, policies, and measures,

⁶²The Climate Change Act (CCA), 2021. Section 1 (f).

⁶³*Ibid.* Section 3 (1).

⁶⁴*Ibid.* Section 24 (1) (a) & (b).

⁶⁵'A review of Nigeria's 2021 Climate Change Act: Potential for increased climate litigation' (March, 2022). <<https://iucn.org/news/commission-environmental-economic-and-social-policy/202203/a-review-nigerias-2021-climate-change-act-potential-increased-climate-litigation>>. Accessed on 25 May, 2025.

⁶⁶U Udoma and B Osagie, (n59).

⁶⁷The National Environmental Standards and Regulations Enforcement Agency Cap 301 LFN 2010.

⁶⁸V A Tari and E C Dia, 'Challenges and Prospects of the Legal Frameworks for Combatting Climate Change in Nigeria' (2024) *Journal of Administration and Corporate Governance*, Volume 4 Number 1.

⁶⁹'Climate Change and Sustainability Disputes: The International Legal Framework', (2021) <https://www.nortonrosefulbright.com/en/knowledge/publications/aec10a3b/climate-change-and-sustainability-disputes-the-international-legal-framework> accessed on 30 May, 2025.

⁷⁰*Ibid.*

⁷¹*Ibid.*

⁷²*Ibid.*

⁷³United Nations Conference on Environment and Development, Rio De Janeiro, Brazil, 3-14 June, 1992.

⁷⁴United Nations Framework Convention on Climate Change (UNFCCC) 1992, Article 2.

and to influence international market mechanisms⁷⁵. However, developing State Parties and some key emitters, do not have binding reduction targets under the Protocol.

The convening of the UNFCCC parties has led to a number of milestones, especially the 2015 Paris Agreement⁷⁶. However, prior to this Agreement, the Conference of the Parties (COP) to the Kyoto Protocol during the eighth session, had adopted an Amendment⁷⁷ to the Protocol, in accordance with its articles 20 and 21. This Amendment introduced new GHG emission reduction targets for a particular Party category, a new chemical to the list of GHGs covered under the Protocol, and revisited timelines for commitment periods. Still, these amendments did not bring developing State Parties under the binding reduction targets. Thereafter, the 2015 Paris Agreement was negotiated during the 21st COP in Paris. The Agreement falls within the UNFCCC framework and currently, the latest legally binding international treaty on climate change⁷⁸. The overarching objective of the Paris Agreement is to reduce global warming well below 2°C but ideally⁷⁹ to 1.5°C, above preindustrial temperatures. The Paris Agreement is structured to recognise and respect state sovereignty with a bottom-up arrangement of Nationally Determined Contributions (NDCs), which helps Parties to communicate actions taken to reduce their own greenhouse gas emissions. To enforce accountability, the Agreement has set up some structures through its relevant articles. For instance, Articles 4 and 13 create transparency system, which contains certain information sharing obligations; Article 14 establishes global stocktake process, which began in 2023 and involves collective progress tracking and assessment every five years; while Article 15 creates a compliance mechanism, which designates a committee to facilitate implementation and promotion of compliance. The 2015 Paris Agreement is regarded as a landmark treaty due to its ambitious goals, broad scope and several mandatory provisions. For instance, provisions relating to transparency and climate change mitigation, used mandatory language e.g., ‘shall’, thereby removing discretion from all Parties. Similar to the above historic 2015 Paris Agreement, parties to the Biodiversity Convention in December 2022 adopted an agreement for nature, known as the *Kunming-Montreal* Global Biodiversity Framework, which succeeds the *Aichi* Biodiversity Targets adopted earlier in 2010. World governments converged at Montreal, Canada, to agree on a new set of goals and framework to secure an ambitious and transformative global plan to set humanity on a path to living in harmony with nature⁸⁰. As the pinnacle of international law on climate change, this Post-2020 Global Biodiversity Framework involves a broad-range measures to deal with the causes and effects of biodiversity loss, climate change and pollution globally. Concerning the useful contribution of the framework in addressing the deepening triple planetary crises, the United Nations Secretary-General assured that ‘An ambitious and effective post-2020 global biodiversity framework, with clear targets and benchmarks, can put nature and people back on track’ adding that, ‘this framework should work in synergy with the Paris Agreement on climate change and other multilateral agreements on forests, desertification and oceans.’⁸¹

In addition to the above international legal frameworks, there are also, several legally binding multilateral environmental instruments that target particular areas of environmental concern that impact, or are impacted by climate change⁸². Some of such instruments include wetland management, pollution from maritime shipping, air pollution, hazardous waste disposal, and biodiversity conservation. ‘Several soft law instruments such as declarations have similarly been introduced multilaterally and regionally’⁸³.

7. Challenges Facing Climate Change Laws

Climate change legislations developed in response to the emerging triple planetary crises are experiencing some inherent challenges. The challenges are related to the development, implementation, and enforcement of the laws. The problems are often complex and multifaceted, involving legal, economic, social, and political issues. Some of the key challenges are:

Public and Political Opposition

In some cases, the State interests in combating climate change are usually short-lived due to political reasons. Consequently, government may be reluctant to pass climate laws because of the potential for negative short-term economic impacts, such as job losses in certain industries like fossil fuels, which could lead to voter backlash. In Nigeria for instance, the non-domestication of the international climate change treaties could be seen as a political issue, which by reason of *section 12* of the Constitution of the Federal Republic of Nigeria 1999⁸⁴, leaves any climate change treaties virtually unenforceable within the Nigerian legal system. Also, some climate change policies may face resistance from the members of the public, particularly when such policies are taken to be costly, limiting lifestyle choices, or infringing on personal rights and/or freedoms.

Economic Impact

Complying with climate change regulations in many cases comes with huge costs for some industries, particularly fossil fuel companies and heavy manufacturers. Accordingly, these industries often resort to lobby against strict climate laws. Moreover, transitioning to renewable energy and low-carbon technologies is quite expensive project, with high upfront investment costs, even if there are long-term savings. Governments face the dilemma of balancing these costs with the benefits.

⁷⁵*Ibid.*

⁷⁶A **legally binding international treaty on climate change**, adopted by 196 Parties at the UN Climate Change Conference (COP21) in Paris, France, on 12 December 2015.

⁷⁷Doha Amendment,

⁷⁸‘Climate Change and Sustainability Disputes: The International Legal Framework’ (n69).

⁷⁹Recent reports by International Panel on Climate Change indicate a significant difference in global impact between global average temperatures rising to 1.5°C and 2°C above preindustrial temperatures. See ‘Special Report: Global Warming of 1.5°C’, IPCC.

⁸⁰United Nations, ‘Biodiversity: Our strongest Natural defense Against Climate Change’ (n19).

⁸¹United Nations, ‘We are Losing our Suicidal War Against Nature’, Secretary-General Tells Biodiversity Summit, Urging Bold Actions Towards Sustainable Future’ (October, 2021). https://press.un.org/en/2021/sgsm20959.doc.htm?_gl=1*1466jt8*_ga*MjAxMjk0NjI2MC4xNjgxNDZAMjg5*_ga_TK9BQL5X7Z*MTcyMzU0MDU2MC4yMi4xLjE3MjM1NDE5NjUuMC4wLjA.. Accessed on 1 June, 2025.

⁸²‘Climate Change and Sustainability Disputes: The International Legal Framework’ (n76).

⁸³*Ibid.*

⁸⁴It states that treaties entered into by Nigeria are not legally binding unless they are domesticated and enacted into Nigerian law.

International Coordination

Due to the differences in nations' level of commitment, priorities, economic development, political will and ability to implement climate policies, reaching global agreement is always difficult with regard to climate change policies. Besides, many international climate agreements including the Paris Agreement are basically, not legally binding but rely on voluntary national commitments, hence the limited enforcement mechanisms. The coordination challenge may result in *carbon leakage*, where businesses may choose to leave a country with strict climate policies and relocate to those with looser regulations. A similar situation to the *flag of convenience* in the law of the sea.

Regulation and Implementation/Enforcement

Climate change laws often require coordination across multiple levels of government and involve a range of sectors including energy, transportation and agriculture. This complexity can lead to gaps or conflicts in regulations. In Nigeria for instance, the multiplicity of agencies and departments responsible for addressing climate change issues results in 'a lack of coherence in decision-making processes, overlapping mandates, inefficient resource utilization, and limited accountability'⁸⁵. Weak enforcement due to limited resources, corruption, or lack of political will all contribute to the challenges climate laws are having across the globe. For instance, in Nigeria, the combined effects of *sections 6 (6) (c) and 12* of the 1999 Constitution present significant impediment to the effective implementation of climate change laws in the country. The Ouster Clause, *section 6 (6) (c)* renders non-justiciable the government's duty, as set out in *section 20* of the Constitution, to provide a safe environment in the country. The presence of the clause impedes the development of environmental and climate change litigation in Nigeria. It is still doubtful whether, even with the enactment of climate change Act, it would be possible to seek judicial enforcement of its provisions without encountering the hurdle presented by *Section 6 (6) (c)* of the Constitution⁸⁶.

8. Conclusion and Recommendations

Addressing the triple planetary crises as discussed in this work, requires an effective and comprehensive legal response that transcends national boundaries and short-term interests. Robust legal frameworks must prioritize sustainability, equity, and resilience, embedding environmental protection into the core of economic, social, and political systems. International coordination and cooperation, reinforced environmental governance, and stringent enforcement mechanisms are all crucial to ensure that climate change laws are not merely symbolic but capable of driving the systemic change needed. Legal frameworks surrounding climate change must be viable enough to boost the attention of all relevant stakeholders and drive political interests for climate actions. Beyond legal responses, there is also, the need for coherent coordination of environmental issues, across different strata of government in accordance with international commitments. Promotion of public-private partnerships and multi-stakeholder collaborations are key, to bolster efforts addressing the new dimensions of environmental challenges. Climate laws should facilitate these collaborations by providing incentives, removing hurdles, and ensuring transparency and accountability. Actions addressing planetary crises are required at international, national, local and corporate levels. By leveraging the potency of law and policy, the international society can navigate the complexities of these interlinked crises, mitigate their impacts, safeguard environmental integrity, and secure a healthful and sustainable environment for our collective future. Effective response to the deepening planetary challenges demands deliberate and coordinated actions at both national and international levels.

Based on the already identified challenges facing climate change laws, this study articulates the following recommendations: At the national level, countries like Nigeria should first and foremost, review and amend their constitutions to reflect the present climate need. Nigeria in particular, should do so by incorporating the duty to protect and improve the environment into the fundamental rights provisions set out in Chapter 4 of the 1999 Constitution. This will place binding obligation on the State with regard to its responsibility towards the protection and improvement of the environment under *Section 20* of the Constitution. In federal systems, the component/state governments should take initiative to enact climate change legislations rather than relying solely on the federal government. This would allow them take meaningful independent climate actions. National climate legislations should be harmonised into a single Act taking into account, the peculiarities of individual countries rather than having multiple and sometimes conflicting laws. This will not only enhance the enforcement mechanisms, but also facilitate the attainment of the nations' targets in relation to the Nationally Determined Contributions (NDC) under the Paris Agreement. There is a need for enhanced institutional coordination and consolidation of efforts within a centralized authority directed at climate change mitigation. This would include streamlining responsibilities, clarifying mandates, and establishing clear mediums of communication and collaboration among relevant entities. By promoting greater coherence and integration, individual countries can strengthen their capacity to effectively respond to climate change, assess progress, and implement impactful policies and regulations.

Responding effectively to these planetary challenges at the international level requires enhanced and expanded international environmental laws that create legally binding frameworks to hold States accountable for their environmental actions. These laws should integrate environmental protection into economic policies, ensuring that developments are in accordance with sustainability goals and green growth. To enhance the efficacy of international climate laws, it is important to strengthen the enforcement and monitoring procedures at both national and international levels to ensure compliance with environmental regulations and prevent loopholes. Public participation should also be encouraged, by allowing citizens and communities to have a voice in environmental decision-making processes, thus making legal frameworks more inclusive and representative. International climate laws should foster multilateral cooperation and promote knowledge-sharing and collective action among nations and corporate entities, as well as incorporate the latest scientific knowledge and technological innovations to address the emerging planetary challenges. Through these joint efforts, the global community can effectively respond to the deepening triple crises, revise the circle, safeguard the planet and foster a more sustainable, resilient future.

⁸⁵V A Tari and E C Dia, (n70).

⁸⁶*Ibid*.