

Journal of Conflict Management & Sustainable Development



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Editor's Note

Welcome to Volume 13 Issue 1 of the Journal of Conflict Management and Sustainable Development. This is the first issue of the Journal in the year 2026 demonstrating our commitment towards spearheading scholarly discourse on the themes of Conflict Management and Sustainable Development.

The Journal has continued to grow as a key academic resource in the fields of Conflict Management, Sustainable Development and related fields of knowledge. It focuses on emerging and pertinent areas and challenges in these fields and proposes necessary legal, institutional and policy reforms towards addressing these issues.

The Journal is now one of the most cited and authoritative publications in the fields of Conflict Management and Sustainable Development. It adheres to the highest level of academic standards and is peer reviewed and refereed so as to ensure credibility of information and validity of data.

This volume covers relevant topics and themes on Conflict Management and Sustainable Development which include: *Ecosystem Health for Sustainable Development: Mainstreaming Biodiversity Conservation in Environmental Law and Governance*; *Revisiting the Decision to Permit Genetically Modified Organisms (GMOs) in Kenya: Lessons from the South African Supreme Court of Appeal*; *Conceptualizing the Meaning of Present Land Injustices in the Constitution of Kenya and Its Grasp by National Land Commission*; *Respect African Cultural Norms: Incorporating Traditional Ecological Knowledge into Current Environmental Education for Sustainability*; *The Scope of Participation by Legal Representatives of Victims in Criminal Proceedings: A Review of the High Court Ruling in Republic v Sgt. Ahmed Rashid Hassan*; *Disaster Management Law in Kenya*; *Renewable Energy for a Sustainable Future? Moving towards Just Transition, Clean Air, One Health and Net Zero in the African Context*; and *The Economics of Loss and Damage: Financing Climate Reparations in the Global South*. The Journal also contains a review of *Journal of Appropriate Dispute Resolution (ADR) & Sustainability Review*, Vol. 4 Issue 1.

I wish to thank the contributing authors, Editorial Team, reviewers and all those who have made it possible to continue publishing this Journal whose impact has been acknowledged both in Kenya and across the globe.

The Editorial team welcomes feedback from our audience across the world to enable us continue improving the Journal and align it to current trends in academia and specifically in the fields of Conflict Management and Sustainable Development.

The Journal adopts an open publication policy and does not discriminate against authors on any grounds. We thus encourage submission of papers from all persons including professionals, students, policy makers and the public at large. These submissions should be channeled to editor@journalofcmsd.net and copied to admin@kmco.co.ke to be considered for publication in subsequent issues of the Journal.

The Journal can be accessed on <https://journalofcmsd.net>

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Editor, Nairobi,
January, 2026.

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Journal of Conflict Management and Sustainable Development

Volume 13 Issue 1 – 2026

Content	Author	Page
Ecosystem Health for Sustainable Development: Mainstreaming Biodiversity Conservation in Environmental Law and Governance	Prof. Kariuki Muigua PhD, SC	1
Revisiting the Decision to Permit Genetically Modified Organisms (GMOs) in Kenya: Lessons from the South African Supreme Court of Appeal	Michael Sang	16
Conceptualizing the Meaning of Present Land Injustices in the Constitution of Kenya and Its Grasp by National Land Commission	Caleb Kipruto Mutai	40
Respect African Cultural Norms: Incorporating Traditional Ecological Knowledge into Current Environmental Education for Sustainability	Prof. Kariuki Muigua PhD, SC	57
The Scope of Participation by Legal Representatives of Victims in Criminal Proceedings: A Review of the High Court Ruling in Republic v Sgt. Ahmed Rashid Hassan	Michael Sang	70
An Appraisal of the Legal & Institutional Frameworks governing Disaster Management in Kenya	Hannah Wamuyu	93
Journal of Appropriate Dispute Resolution (ADR) & Sustainability Review, Vol. 4 Issue 1	Mwati Muriithi	129
Renewable Energy for a Sustainable Future? Moving towards Just Transition, Clean Air, One Health and Net Zero in the African Context	Prof. Kariuki Muigua PhD, SC	132
The Economics of Loss and Damage: Financing Climate Reparations in the Global South	Joshua Kipyego Fwamba Youngreen Peter Mudeyi	147

Ecosystem Health for Sustainable Development: Mainstreaming Biodiversity Conservation in Environmental Law and Governance

*By: Kariuki Muigua**

Abstract

This paper discusses approaches towards nurturing healthy ecosystems for Sustainable Development. The paper notes that healthy ecosystems are integral in the quest for Sustainable Development by supporting biodiversity. It examines the benefits of healthy ecosystems for biodiversity conservation. Despite their role in supporting biodiversity, the paper observes that terrestrial, freshwater and marine ecosystems are facing mounting threats from human-induced activities. It notes that these activities are fuelling the loss of biodiversity with severe consequences for people and planet. In light of the foregoing, the paper argues that nurturing healthy ecosystems is key for biodiversity conservation and Sustainable Development. It discusses how biodiversity conservation can be mainstreamed in environmental law and governance towards fostering ecosystem health for Sustainable Development.

1.0 Introduction

The *Convention on Biological Diversity*¹ defines an ecosystem as a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit². Further, according to the United Nations Environment Programme (UNEP), an ecosystem is a community of organisms and their physical environment interacting as an ecological unit³. It has been observed that the key identifying feature of an

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¹ Convention on Biological Diversity, 5 June 1992 (1760 U.N.T.S. 69)

² Ibid, article 2

³ United Nations Environment Programme., 'Ecosystem.' Available at

ecosystem is that it comprises a system with interactions between its living elements and their environment⁴.

An ecosystem may be natural or artificial, land-based or water-based⁵. It is comprised of a biotic community including plants, animals and other living organisms⁶. Some of the key ecosystems include *freshwater ecosystems* such as rivers and lakes⁷; *terrestrial ecosystems* including forests, grasslands, deserts, and mountain ecosystems⁸; and *marine ecosystems* including coral reefs, estuaries and mangroves⁹.

It has been observed that ecosystems are crucial life-support systems on Earth connecting every species and resource in a complex balance¹⁰. Healthy ecosystems provide critical services including clean air, fresh water, food, energy and natural medicines thus supporting human health

<https://leap.unep.org/en/knowledge/glossary/ecosystem> (Accessed on 05/01/2026)

⁴ Ecosystems., Available at

<http://uknea.unep-wcmc.org/EcosystemAssessmentConcepts/tabid/98/Default.aspx#:~:text=The%20most%20widely%20used%20definition,since%20all%20its%20elements%20interact>
(Accessed on 05/01/2026)

⁵ Balasubramanian. A., 'Ecosystem and its Components' Available at

https://www.researchgate.net/publication/314213426_ECOSYSTEM_AND_ITS_COMPONENTS (Accessed on 05/01/2026)

⁶ Ibid

⁷ Hitt. N et al., 'Freshwater Ecosystems and Biodiversity' Available at

<https://www.amnh.org/content/download/141379/2285479/file/freshwater-ecosystems-and-biodiversity.pdf> (Accessed on 05/01/2026)

⁸ East African Community., 'Terrestrial Ecosystems' Available at

<https://www.eac.int/environment/terrestrial-ecosystems> (Accessed on 05/01/2026)

⁹ United Nations Environment Programme., 'Supporting sound ecosystem management' Available at <https://www.unep.org/regions/africa/regional-initiatives/supporting-sound-ecosystem-management> (Accessed on 05/01/2026)

¹⁰ Ecosystem: Definition, Components, and Structure., Available at

<https://greenly.earth/en-us/blog/ecology-news/ecosystem-definition-components-and-structure> (Accessed on 05/01/2026)

and well-being¹¹. Ecosystems also support biodiversity, regulate the climate, protect humanity from natural disasters, and support recreational activities¹². Healthy ecosystems therefore play a key role in sustaining life on Earth including through supporting biodiversity.

Despite their vital importance for people and planet, it has been observed that ecosystems all over the world are facing mounting threats from human activities including deforestation, pollution, agricultural expansion, infrastructure development, urbanisation and overfishing¹³. These activities undermine the availability and quality of ecosystem services with negative consequences for people and planet¹⁴. Fostering ecosystem health is therefore paramount in the pursuit of Sustainable Development.

This paper discusses approaches towards nurturing healthy ecosystems for Sustainable Development. The paper notes that healthy ecosystems are integral in the quest for Sustainable Development by supporting biodiversity. It examines the benefits of healthy ecosystems for biodiversity conservation. Despite their role in supporting biodiversity, the paper observes that terrestrial, freshwater and marine ecosystems are facing mounting threats from human-induced activities. It notes that these activities are fuelling the loss of biodiversity with severe consequences for people and planet. In light of the foregoing, the paper argues that nurturing healthy ecosystems is key for biodiversity conservation and Sustainable Development. It discusses how biodiversity conservation can be mainstreamed in environmental law and governance towards fostering ecosystem health for Sustainable Development.

¹¹ World Health Organization., 'Biodiversity' Available at <https://www.who.int/news-room/fact-sheets/detail/biodiversity> (Accessed on 05/01/2026)

¹² Ecosystems: Securing a Healthy Future., Available at <https://www.green.earth/ecosystems> (Accessed on 05/01/2026)

¹³ Ibid

¹⁴ Ibid

2.0 Ecosystems and Biodiversity Conservation: Promises and Pitfalls

Ecosystems play an important role in supporting biodiversity. For example, terrestrial ecosystems such as forests are among the most important ecosystems on the planet supporting most of its biodiversity. It has been observed that forests harbour and provide habitats for most of the Earth's terrestrial biodiversity including plant and tree species, mammals, amphibians and birds¹⁵. Forests have been identified as biodiversity hotspots comprising not only trees but also many plants, animals and microorganisms and their associated genetic diversity¹⁶. Due to their crucial role as biodiversity hotspots, it has been argued that the conservation of global biodiversity is intrinsically dependent on the way in which we interact with and use forests¹⁷. In addition, other terrestrial ecosystems such as mountains provide scattered but diverse range of habitats in which numerous plants and animals can be found¹⁸. It has been pointed out that mountain ecosystems are vital in supporting terrestrial biodiversity, especially in the tropics, where they host nearly half of the global biodiversity hotspots¹⁹.

Freshwater ecosystems including rivers, lakes and wetlands also play an important role in biodiversity conservation. It has been observed that these ecosystems provide unique habitat for many plants and animals,

¹⁵ United Nation's Environment Programme., 'Earth's Biodiversity depends on the World's Forests' Available at <https://www.unep-wcmc.org/en/news/earths-biodiversity-depends-on-the-worlds-forests> (Accessed on 05/01/2026)

¹⁶ Secretariat of the Convention on Biological Diversity., 'Forest Biodiversity' Available at <https://www.cbd.int/doc/meetings/cop/cop-09/media/cop9-press-kit-forest-en.pdf> (Accessed on 05/01/2026)

¹⁷ United Nation's Environment Programme., 'Earth's Biodiversity depends on the World's Forests' Op Cit

¹⁸ Mountain ecosystem., Available at <https://www.britannica.com/science/mountain-ecosystem> (Accessed on 05/01/2026)

¹⁹ International Centre for Integrated Mountain Development., 'Mountains matter for Biodiversity' Available at <https://www.icimod.org/mountains-matter-for-biodiversity/> (Accessed on 05/01/2026)

including one third of all vertebrate species on the planet²⁰. Despite covering less than 1 percent of the planet's surface, freshwater ecosystems are reservoirs for biodiversity supporting many animal species and aquatic plants²¹.

In addition, coastal/marine ecosystems such as coral reefs, mangrove forests, seagrass beds and estuaries are biodiversity hotspots²². It is estimated that the ocean constitutes over 90 per cent of the habitable space on the planet and contains nearly 250,000 known species, with many more remaining to be discovered²³. Healthy marine ecosystems are essential for life on Earth and play a key role in planetary wellbeing²⁴. It has been observed that these ecosystems are one of the greatest sources of biodiversity and food, they regulate the climate, and are a major carbon sink²⁵.

Healthy ecosystems therefore play an important role in biodiversity conservation. By supporting biodiversity, terrestrial, freshwater and

²⁰ United Nations Decade on Ecosystem Restoration., 'Freshwater' Available at <https://www.decadeonrestoration.org/types-ecosystem-restoration/fresh-water#:~:text=These%20ecosystems%20range%20from%20mangroves,To%20learn%20more>: (Accessed on 05/01/2026)

²¹ Spotlight on freshwater aquatic ecosystems., Available at <https://www.e-biom.com/spotlight-on-freshwater-aquatic-ecosystems?lang=en#:~:text=Freshwater%20aquatic%20ecosystems%20are%20complex,degraded%20ecosystems%20in%20the%20world>. (Accessed on 05/01/2026)

²² Secretariat of the Convention on Biological Diversity., 'Oceans Contain a Wealth of Biodiversity' Available at <https://www.cbd.int/article/biodiversityforwater-1#:~:text=Deep%2Dseabed%20habitats%20host%20between,sustainable%20fishery%20and%20mariculture%20management>. (Accessed on 05/01/2026)

²³ United Nations., 'Marine Biodiversity and Ecosystems Underpin a Healthy Planet and Social Well-Being' Available at <https://www.un.org/en/chronicle/article/marine-biodiversity-and-ecosystems-underpin-healthy-planet-and-social-well-being> (05/01/2026)

²⁴ European Commission., 'EU Action Plan: Protecting and Restoring Marine Ecosystems for Sustainable and Resilient Fisheries' Available at <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX%3A52023DC0102> (Accessed on 05/01/2026)

²⁵ Ibid

marine ecosystems sustain life on Earth including through ensuring the availability of ecosystem services such as clean air, water, food, energy, medicines and climate regulation²⁶. However, the health of these ecosystems is being threatened by several factors. For example, human activities such as agricultural expansion, urbanisation and infrastructure development are causing deforestation and forest degradation with severe consequences for people and planet²⁷. These challenges fuel biodiversity loss due to destruction of habitats undermining the availability and quality of ecosystem services²⁸. In addition, it has been observed that freshwater ecosystems are facing mounting threats due to pollution from chemicals, plastics and sewage as well as over-fishing and over-extraction of water to irrigate crops, generate power and supply industry and homes²⁹. Wetlands all the world are also being degraded and drained to support agriculture among other activities³⁰. These threats are contributing to biodiversity loss in freshwater ecosystems. For example, it is estimated that one in three freshwater species are threatened with extinction³¹. In addition, human activities including excessive extraction of natural resources from the ocean through deep sea mining and drilling, marine pollution, destruction of marine/coastal ecosystems and habitats, rapid urbanization, and climate change are posing significant threats to marine biodiversity³². It has been argued that loss of marine biodiversity undermines the healthy functioning of the ocean and its ability to provide the services that we need to survive and thrive³³.

²⁶ World Health Organization., 'Biodiversity' Op Cit

²⁷ International Union for Conservation of Nature., 'Deforestation and Forest Degradation' Available at <https://iucn.org/resources/issues-brief/deforestation-and-forest-degradation> (Accessed on 05/01/2026)

²⁸ Ibid

²⁹ United Nations Decade on Ecosystem Restoration., 'Freshwater' Op Cit

³⁰ Ibid

³¹ Ibid

³² United Nations Educational, Scientific and Cultural Organization., 'What is Ocean Biodiversity' Available at <https://oceanliteracy.unesco.org/ocean-biodiversity/> (Accessed on 05/01/2026)

³³ United Nations., 'Marine Biodiversity and Ecosystems Underpin a Healthy Planet and Social Well-Being' Op Cit

In light of the foregoing challenges, it is imperative to foster ecosystem health for Sustainable Development.

3.0 Mainstreaming Biodiversity Conservation into Environmental Law and Governance

Fostering healthy ecosystems is vital in the pursuit of Sustainable Development. It has been observed that healthy communities are sustained by well-functioning ecosystems, which provide critical services including clean air, fresh water, food, energy and natural medicines³⁴. Healthy ecosystems also support biodiversity, prevent diseases and stabilize the climate³⁵. Ensuring ecosystem health is therefore key for Sustainable Development. However, terrestrial, freshwater and marine/coastal ecosystems are being damaged and degraded all over the world due to human and environmental factors including pollution, deforestation, agricultural expansion, infrastructure development, land degradation and climate change³⁶. These activities fuel biodiversity loss with negative consequences for people and planet.

In order to foster ecosystem health for Sustainable Development, it is imperative to mainstream biodiversity conservation into environmental law and governance. It has been correctly noted that sound biodiversity conservation is key in ensuring healthy and functioning ecosystems thus ensuring a continuous supply of ecosystem services such as food, water, clean air and medicines³⁷. Since biodiversity underpins all ecosystems and their services, mainstreaming biodiversity conservation in environmental law and governance can foster ecosystem health for Sustainable

³⁴ World Health Organization., 'Biodiversity' Op Cit

³⁵ United Nations Environment Programme., 'Ecosystem.' Op Cit

³⁶ International Union for Conservation of Nature., 'Deforestation and Forest Degradation' Op Cit

³⁷ United States Environmental Protection Agency., 'Biodiversity Underpins all Ecosystems and their Services' Available at <https://www.epa.gov/enviroatlas/enviroatlas-benefit-category-biodiversity-conservation> (Accessed on 06/01/2026)

Development³⁸.

Biodiversity conservation is a key agenda globally. For example, the *Convention on Biological Diversity*³⁹ aims to foster the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources⁴⁰. In addition, the *Kunming-Montreal Global Biodiversity Framework (GBF)*⁴¹ was adopted towards strengthening efforts to conserve biodiversity worldwide for Sustainable Development. It aims to halt and reverse biodiversity loss and ensure sustainable use of biodiversity towards meeting the objectives of the Convention on Biological Diversity and enhancing the role of biodiversity in Sustainable Development⁴². Further, the United Nations *2030 Agenda for Sustainable Development*⁴³ recognises the role of biodiversity conservation in ensuring ecosystem health for sustainability. Sustainable Development Goal (SDG) 15 under the Agenda seeks to *inter alia* conserve and halt the loss of biodiversity for Sustainable Development⁴⁴. It urges countries to take urgent and significant action to reduce the degradation of natural habitats and ecosystems, halt the loss of biodiversity, and protect and prevent the extinction of threatened species⁴⁵.

Sound biodiversity conservation is therefore crucial for ecosystem health

³⁸ Ibid

³⁹ Convention on Biological Diversity, Op Cit

⁴⁰ Ibid, article 1

⁴¹ Convention on Biological Diversity., 'Decision Adopted by the Conference of the Parties to the Convention on Biological Diversity: 15/4. Kunming-Montreal Global Biodiversity Framework' Available at <https://www.cbd.int/doc/decisions/cop-15/cop-15-dec-04-en.pdf> (Accessed on 06/01/2026)

⁴² Ibid

⁴³ United Nations General Assembly., 'Transforming Our World: the 2030 Agenda for Sustainable Development.' 21 October 2015, A/RES/70/1., Available at <https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf> (Accessed on 06/01/2026)

⁴⁴ Ibid

⁴⁵ Ibid

and Sustainable Development. Achieving this goal involves mainstreaming biodiversity conservation in environmental law and governance including through the adoption of National Biodiversity Strategy and Action Plans (NBSAPs)⁴⁶. The Convention on Biological Diversity requires parties to develop, implement and report on NBSAPs and to mainstream the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes, and policies⁴⁷. It has been noted that NBSAPs reflect national strategies, plans, or programs for the conservation and sustainable use of biodiversity as aligned with measures set out in the Convention on Biological Diversity⁴⁸. NBSAPs therefore provide an effective way towards mainstreaming biodiversity conservation into environmental law and governance by identifying conservation priorities, strategies, plans and policies according to national needs and interests⁴⁹. It is therefore imperative for all countries to adopt and implement NBSAPs towards mainstreaming biodiversity conservation into environmental law and governance.

In addition, there is need to implement effective biodiversity conservation strategies for ecosystem health. For example, by restoring terrestrial, freshwater and marine ecosystems, it is possible to foster ecosystem health and sound biodiversity conservation for Sustainable Development⁵⁰. It has been observed that ecosystem restoration returns critical habitats and ecosystems to a healthy state, increases the amount of carbon sequestered therefore strengthening climate change mitigation while also

⁴⁶ Secretariat of the Convention on Biological Diversity Secretariat., 'Guidance on Integrating Human Rights in National Biodiversity Strategy and Action Plans (NBSAPs)' Available at <https://www.cbd.int/doc/nbsap/Integrating-human%20rights-in-NBSAPs.pdf> (Accessed on 06/01/2026)

⁴⁷ The Convention on Biological Diversity., Op Cit

⁴⁸ Secretariat of the Convention on Biological Diversity., 'Guidance on Integrating Human Rights in National Biodiversity Strategy and Action Plans (NBSAPs)' Op Cit

⁴⁹ Ibid

⁵⁰ Center for Biological Diversity., 'Ecosystem Restoration' Available at https://www.biologicaldiversity.org/programs/public_lands/forests/ecosystem_restoration/# (Accessed on 06/01/2026)

strengthening biodiversity conservation efforts⁵¹. Ecosystem restoration is vital in biodiversity conservation since it reclaims habitats and ecosystem functions and recovers the ecological integrity of the lands and waters on which plants, animals and other living organisms depend⁵². It is therefore necessary to restore damaged and degraded ecosystems for ecosystem health and biodiversity conservation.

Involving multiple stakeholders in biodiversity conservation is also crucial towards fostering ecosystem health for Sustainable Development⁵³. For example, indigenous peoples, local communities and rural women have been identified as the unsung heroes of biodiversity conservation possessing indigenous and traditional knowledge that emphasizes harmony with nature⁵⁴. Harnessing their contribution can therefore aid in conserving critical ecosystems and threatened species for ecosystem health and biodiversity conservation⁵⁵. Further, the private sector can play a crucial role in fostering ecosystem health including through unlocking biodiversity finance which can be channeled to restoration efforts and developing biodiversity-friendly business models that emphasize harmony with nature⁵⁶. Embracing the role of various stakeholders including indigenous peoples, local communities, women and the private sector can therefore strengthen biodiversity conservation efforts for

⁵¹ World Economic Forum., 'What are Natural Climate Solutions?' Available at <https://www.weforum.org/agenda/2021/09/what-are-natural-climate-solutions-ncs-alliance/#:~:text=NCS%20are%20actions%20that%20avoid,forest%20conservation%2C%20restoration%20and%20management> (Accessed on 06/01/2026)

⁵² Center for Biological Diversity., 'Ecosystem Restoration' Op Cit

⁵³ Secretariat of the Convention on Biological Diversity., 'Acting for biodiversity can take a diversity of forms' Available at <https://www.cbd.int/article/idb-2025-nudges#:~:text=Biodiversity%20conservation%20and%20restoration%20requires,the%200KMGBF%20and%20the%20SDGs> (Accessed on 06/01/2026)

⁵⁴ United Nations Environment Programme., 'Indigenous Peoples: The unsung heroes of conservation' Available at <https://www.unep.org/news-and-stories/story/indigenous-peoples-unsung-heroes-conservation> (Accessed on 06/01/2026))

⁵⁵ Ibid

⁵⁶ Secretariat of the Convention on Biological Diversity., 'Acting for biodiversity can take a diversity of forms' Op Cit

Sustainable Development.

4.0 Conclusion

Ensuring ecosystem health is vital in the pursuit of Sustainable Development. Achieving this goal involves mainstreaming biodiversity conservation in environmental law and governance. This can be actualised through developing and implementing NBSAPs⁵⁷; restringing damaged and degraded ecosystems⁵⁸; and involving multiple stakeholders in biodiversity conservation efforts⁵⁹. Mainstreaming biodiversity conservation in environmental law and governance is necessary and practical towards fostering ecosystem health for Sustainable Development.

⁵⁷ Secretariat of the Convention on Biological Diversity Secretariat., 'Guidance on Integrating Human Rights in National Biodiversity Strategy and Action Plans (NBSAPs)' Op Cit

⁵⁸ Center for Biological Diversity., 'Ecosystem Restoration' Op Cit

⁵⁹ Secretariat of the Convention on Biological Diversity., 'Acting for biodiversity can take a diversity of forms' Op Cit

References

Balasubramanian. A., 'Ecosystem and its Components' Available at https://www.researchgate.net/publication/314213426_ECOSYSTEM_AND_ITS_COMPONENTS

Center for Biological Diversity., 'Ecosystem Restoration' Available at https://www.biologicaldiversity.org/programs/public_lands/forests/ecosystem_restoration/#

Convention on Biological Diversity, 5 June 1992 (1760 U.N.T.S. 69)

Convention on Biological Diversity., 'Decision Adopted by the Conference of the Parties to the Convention on Biological Diversity: 15/4. Kunming-Montreal Global Biodiversity Framework' Available at <https://www.cbd.int/doc/decisions/cop-15/cop-15-dec-04-en.pdf>

East African Community., 'Terrestrial Ecosystems' Available at <https://www.eac.int/environment/terrestrial-ecosystems>

Ecosystem: Definition, Components, and Structure., Available at <https://greenly.earth/en-us/blog/ecology-news/ecosystem-definition-components-and-structure>

Ecosystems., Available at <http://uknea.unep-wcmc.org/EcosystemAssessmentConcepts/tabid/98/Default.aspx#:~:text=The%20most%20widely%20used%20definition,since%20all%20its%20elements%20interact>

Ecosystems: Securing a Healthy Future., Available at <https://www.green.earth/ecosystems>

European Commission., 'EU Action Plan: Protecting and Restoring Marine Ecosystems for Sustainable and Resilient Fisheries' Available at <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX%3A52023DC0102>

Hitt. N et al., 'Freshwater Ecosystems and Biodiversity' Available at <https://www.amnh.org/content/download/141379/2285479/file/freshwater-ecosystems-and-biodiversity.pdf>

International Centre for Integrated Mountain Development., 'Mountains matter

for Biodiversity' Available at <https://www.icimod.org/mountains-matter-for-biodiversity/>

International Union for Conservation of Nature., 'Deforestation and Forest Degradation' Available at <https://iucn.org/resources/issues-brief/deforestation-and-forest-degradation>

Mountain ecosystem., Available at <https://www.britannica.com/science/mountain-ecosystem>

Secretariat of the Convention on Biological Diversity Secretariat., 'Guidance on Integrating Human Rights in National Biodiversity Strategy and Action Plans (NBSAPs)' Available at <https://www.cbd.int/doc/nbsap/Integrating-human%20rights-in-NBSAPs.pdf>

Secretariat of the Convention on Biological Diversity., 'Acting for biodiversity can take a diversity of forms' Available at <https://www.cbd.int/article/idb-2025-nudges#:~:text=Biodiversity%20conservation%20and%20restoration%20requirements,the%20KMGBF%20and%20the%20SDGs>

Secretariat of the Convention on Biological Diversity., 'Forest Biodiversity' Available at <https://www.cbd.int/doc/meetings/cop/cop-09/media/cop9-press-kit-forest-en.pdf>

Secretariat of the Convention on Biological Diversity., 'Oceans Contain a Wealth of Biodiversity' Available at <https://www.cbd.int/article/biodiversityforwater-1#:~:text=Deep%2Dseabed%20habitats%20host%20between,sustainable%20fishery%20and%20mariculture%20management>

Spotlight on freshwater aquatic ecosystems., Available at <https://www.e-biom.com/spotlight-on-freshwater-aquatic-ecosystems?lang=en#:~:text=Freshwater%20aquatic%20ecosystems%20are%20complex,degraded%20ecosystems%20in%20the%20world>

United Nation's Environment Programme., 'Earth's Biodiversity depends on the World's Forests' Available at <https://www.unep-wcmc.org/en/news/earths-biodiversity-depends-on-the-worlds-forests>

United Nations Decade on Ecosystem Restoration., 'Freshwater' Available at <https://www.decadeonrestoration.org/types-ecosystem-restoration/fresh-water#:~:text=These%20ecosystems%20range%20from%20mangroves,To%20learn%20more>

United Nations Educational, Scientific and Cultural Organization., 'What is Ocean Biodiversity' Available at <https://oceanliteracy.unesco.org/ocean-biodiversity/>

United Nations Environment Programme., 'Ecosystem.' Available at <https://leap.unep.org/en/knowledge/glossary/ecosystem>

United Nations Environment Programme., 'Indigenous Peoples: The unsung heroes of conservation' Available at <https://www.unep.org/news-and-stories/story/indigenous-peoples-unsung-heroes-conservation>

United Nations Environment Programme., 'Supporting sound ecosystem management' Available at <https://www.unep.org/regions/africa/regional-initiatives/supporting-sound-ecosystem-management>

United Nations General Assembly., 'Transforming Our World: the 2030 Agenda for Sustainable Development.' 21 October 2015, A/RES/70/1., Available at <https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf>

United Nations., 'Marine Biodiversity and Ecosystems Underpin a Healthy Planet and Social Well-Being' Available at <https://www.un.org/en/chronicle/article/marine-biodiversity-and-ecosystems-underpin-healthy-planet-and-social-well-being>

United States Environmental Protection Agency., 'Biodiversity Underpins all Ecosystems and their Services' Available at <https://www.epa.gov/enviroatlas/enviroatlas-benefit-category-biodiversity-conservation>

World Economic Forum., 'What are Natural Climate Solutions?' Available at <https://www.weforum.org/agenda/2021/09/what-are-natural-climate-solutions-ncs->

*Ecosystem Health for Sustainable Development:
Mainstreaming Biodiversity Conservation in
Environmental Law and Governance:
Kariuki Muigua*

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[alliance/#:~:text=NCS%20are%20actions%20that%20avoid,forest%20conservation%2C%20restoration%20and%20management](#)

World Health Organization., 'Biodiversity' Available at <https://www.who.int/news-room/fact-sheets/detail/biodiversity>

Revisiting the Decision to Permit Genetically Modified Organisms (GMOs) in Kenya: Lessons from the South African Supreme Court of Appeal

By: Michael Sang *

Abstract

This paper critically examines the legal and procedural flaws in Kenya's recent decision to lift the ban on genetically modified organisms (GMOs) and proposes a pathway toward a more robust regulatory framework. Through an analysis of Kenya's existing biosafety legislation and a comparative study of the South African Supreme Court of Appeal's decision in African Centre for Biodiversity NPC v Minister of Agriculture, Forestry and Fisheries and Others [2024] ZASCA 143, the paper underscores the importance of the precautionary principle, legislative clarity, and public participation in GMO governance. Key recommendations include enhancing the National Biosafety Authority's operational procedures, ensuring independent verification of risk assessments, and fostering inclusive public engagement. The goal is to guide Kenya in developing a transparent, risk-averse regulatory environment that balances innovation with environmental and public safety.

Keywords: *GMO regulation, biosafety, Kenya, precautionary principle, public participation, legislative reform, environmental protection; South Africa*

1. Introduction

The regulation of genetically modified organisms (GMOs) in Kenya has sparked significant debate, particularly following the Cabinet's recent decision to lift a longstanding ban on GMOs¹. This decision, aimed at addressing food insecurity and improving agricultural resilience, has been met with widespread concerns over potential health, environmental, and socioeconomic risks associated with GMO use². At the heart of this paper is the objective to critically examine the legal

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¹ Cliffe Dekker Hofmeyr (2023) 'Agriculture, food security, and the regulation of GMOs in Kenya' *Agriculture, Aquaculture & Fishing Sector*

² *ibid*

and procedural flaws within Kenya's regulatory approach to GMOs, particularly focusing on the Cabinet's unilateral decision to remove the moratorium. By analysing the gaps in the current framework, this paper seeks to highlight the urgency for a more robust, precautionary, and transparent approach in GMO governance, one that aligns with both constitutional mandates and international biosafety standards.

In exploring potential reforms, the analysis centers on lessons Kenya can draw from the South African Supreme Court of Appeal's recent judgment in *African Centre for Biodiversity NPC v Minister of Agriculture, Forestry and Fisheries and Others* [2024] ZASCA 143. This landmark case underscores the importance of adhering to the precautionary principle, ensuring legislative clarity, and embedding public participation in the regulation of GMOs³. Specifically, the judgment reveals how South African authorities' failure to critically and independently assess GMO applications led to procedural flaws, ultimately prompting the court to set aside the approval of a GMO variety of maize and mandate reconsideration.⁴

Through a comparative analysis of this judgment, the paper provides a framework for Kenya to strengthen its GMO regulation by emphasizing the need for cautious, well-defined, and inclusive decision-making processes. The ultimate goal is to offer practical recommendations for reform, helping Kenya build a regulatory environment that safeguards public health, environmental integrity, and societal trust in biotechnology advancements.

2. The Current Regulation of Genetically Modified Organisms (GMOs) in Kenya

2.1 Biosafety Act, 2009

Purpose and Policy Background:

The Act is premised on the *National Biotechnology Development Policy* 2006, aiming

³ *African Centre for Biodiversity NPC v Minister of Agriculture, Forestry and Fisheries and Others* [2024] ZASCA 143

⁴ *Ibid*, paragraph 25

to guide responsible GMO use by addressing potential risks to human health and the environment.⁵ Establishment and Function of the National Biosafety Authority:

Section 5: Establishes the National Biosafety Authority (NBA) as the main regulatory body.⁶

Section 7: The NBA is tasked with overseeing GMO activities, including approvals for research, transfer, and handling of GMOs, to safeguard human and environmental health.

Application and Risk Assessment Requirements

Sections 18–31 cover detailed procedures for obtaining approvals for GMO use in Kenya, such as importation, environmental release, and market placement.

Section 27: Specifies the requirement for comprehensive risk assessments for GMO applications, following standards set in the Fifth Schedule.⁷

Public Participation and Transparency

Section 54: Emphasizes public awareness and participation in decisions regarding GMO use, requiring the Authority to publish decisions and engage the public in relevant applications.

Environmental and Health Protections:

Section 40 and 42 provide mechanisms for environmental restoration and cessation orders, allowing the Authority to address unintended GMO releases and stop activities posing imminent environmental or health risks.⁸

2.2 National Biosafety Authority (NBA)

2.2.1 Biosafety (Contained Use) Regulations, 2011

The *Biosafety (Contained Use) Regulations, 2011* govern the containment measures, approvals, and contingency planning associated with GMO research and use within controlled environments. Key regulatory points include:

Classification of Containment Levels

Regulation 5(3) provides containment level classifications (Levels 1–4) based on

⁵ Biosafety Act, 2009, Section 4

⁶ Ibid, sec 5

⁷ Ibid, sec 27

⁸ Ibid, secs 40 & 42

the potential risk of GMO use. The NBA assesses and assigns these levels for laboratories, greenhouses, and other controlled-use premises.⁹

Institutional Biosafety Committees (IBCs)

Under **Regulation 6**, research institutions must establish an IBC to oversee GMO activities, ensure compliance with biosafety measures, and prepare and submit contained-use applications to the NBA.

Application for Contained Use:

Regulation 7 mandates that individuals obtain written NBA approval before engaging in contained use, submitted through their IBC. Applications must adhere to formats specified in the Third Schedule and include risk assessments.¹⁰

Approval Conditions and Validity:

Approvals for contained use, according to Regulations 9–10, specify validity periods, require periodic reporting, and are subject to NBA's suspension or revocation if containment measures are violated.¹¹

Contingency Planning and Emergency Response:

Contingency plans are required prior to GMO use, detailing mitigation steps for accidental releases¹², with emergency measures implemented in case of incidents. These regulations set stringent guidelines for handling GMOs in containment facilities, emphasizing safety protocols, compliance through IBC oversight, and contingency measures. This structure reflects Kenya's commitment to responsible GMO research and containment, aligning with best practices that can benefit from lessons drawn from South Africa's jurisprudence on GMO regulation.

2.2.2 Biosafety (Environmental Release/Placing on the Market) Regulations, 2011

The Biosafety (Environmental Release/Placing on the Market) Regulations, 2011 establish protocols under the National Biosafety Authority (NBA) for the controlled environmental release of genetically modified organisms (GMOs) in

⁹ Biosafety (Contained Use) Regulations, 2011, Regulation 5(3)

¹⁰ Ibid, reg 7

¹¹ Ibid, Reg 11

¹² Ibid, Regs 13–15

Kenya.¹³ Key provisions include:

- ❖ Approval Requirement: No person shall conduct an environmental release or place a GMO on the market without the NBA's written approval, as detailed in Regulation 5(1) and Regulation 6(1). Applications must follow the specified form and are subject to an approval fee and potential additional risk assessments.¹⁴
- ❖ Risk Assessment: Regulation 7(2) mandates that applications undergo a thorough risk assessment, examining GMO uses and potential health or environmental impacts. The Authority may require further information from applicants to make a fully informed decision.¹⁵
- ❖ Monitoring and Reporting: Once approval is granted, the applicant, along with relevant regulatory bodies, must monitor the release per Regulation 14(1). The NBA ensures all necessary actions to prevent adverse effects on health or the environment.¹⁶
- ❖ Public Participation: To foster transparency, the NBA must publish guidance for public awareness. Notices regarding GMO applications are to be made available to the public, allowing for comments within 21 days.¹⁷

2.2.3 Biosafety (Import, Export and Transit) Regulations, 2011

The Biosafety (Import, Export and Transit) Regulations, 2011 outlines critical requirements for the movement of GMOs across Kenyan borders to ensure biosafety compliance and protection of human health and the environment¹⁸. Key regulations include:

- ❖ Applications for Import: Any party intending to import GMOs must seek approval from the National Biosafety Authority (NBA), with applications to include detailed information about the GMO, such as species, quantity,

¹³ Biosafety (Environmental Release/Placing on the Market) Regulations, 2011

¹⁴ Ibid, Regulation 5(1) and Regulation 6(1).

¹⁵ Ibid, reg 7(2)

¹⁶ Ibid, reg 14(1)

¹⁷ Ibid, Reg 12

¹⁸ Biosafety (Import, Export and Transit) Regulations, 2011

port of entry, and intended purpose. Import applications are evaluated to ensure compliance with biosafety standards.¹⁹

- ❖ Unauthorized Importation: Should an unauthorized GMO import occur, the NBA may take corrective action, including refusal of entry, destruction, or setting specific usage conditions.²⁰
- ❖ Export and Transit Regulations: Similar application procedures are required for exports and transits. GMO transits must meet packaging and transport standards and be approved at both entry and exit points. Additionally, conditions are established to prevent unauthorized GMO transits and manage unintentional releases.²¹
- ❖ Offences and Penalties: Violations of these regulations may result in fines up to twenty million shillings or imprisonment for up to ten years, ensuring strict adherence to biosafety requirements.²²

These regulations create a structured framework for managing GMOs entering or passing through Kenya, emphasizing controlled conditions to safeguard public health and environmental integrity.²³

2.2.4 Biosafety (Labelling) Regulations, 2012

The Biosafety (Labelling) Regulations, 2012 under Regulation 3(a) and (b) aim to inform consumers by ensuring that genetically modified (GM) foods, feed, or ingredients are properly labelled to facilitate informed choices and traceability.²⁴ According to Regulation 7, pre-packaged GM products must explicitly state "genetically modified" alongside the specific ingredient or product name on the

¹⁹ Ibid, Regulation 4

²⁰ Ibid, Regulation 5

²¹ Ibid, Regulations 6-8

²² Ibid, Regulation 18

²³ National Biosafety Authority, *Guidelines for Labelling of GMOs and Their Derived Products in Kenya* (NBA Guideline Ref: NBA/TEC/ML/12, January 2025) <https://www.biosafetykenya.go.ke/wp-content/uploads/2025/08/Guidelines-for-Labelling-GMOs.pdf> accessed 11 January 2026.

²⁴ Biosafety (Labelling) Regulations, 2012, Regulation 3(a) and (b)

label. For non-pre-packaged products, the requirement is for visible labelling at the display point, indicating "genetically modified organisms" or the specific modified organism. Additional labelling is mandatory for foods with altered characteristics,²⁵ which covers factors like composition, nutritional values, and allergenicity, compared to their conventional counterparts.

Regulation 9 requires operators to ensure traceability by providing written transmission of GM status to each operator in the supply chain, aiding regulatory compliance and consumer awareness. Violations of these labelling standards attract penalties under Regulation 12.

2.2.5 Cabinet Communique, 2023 GMOs (Kenya)

In October 2022, the Kenyan Cabinet lifted a decade-long ban on genetically modified organisms (GMOs), permitting their cultivation and importation to address food security challenges amid severe drought conditions.²⁶ This decision was formalized through a Cabinet Communiqué, signalling a significant policy shift towards embracing biotechnology in agriculture. The Communiqué emphasized the government's commitment to redefining agriculture by adopting crops resistant to pests and diseases, aiming to enhance food security and reduce reliance on rain-fed agriculture.²⁷ It also highlighted the establishment of a robust regulatory framework, including the National Biosafety Authority (NBA), to oversee the safe handling and use of GMOs in Kenya.²⁸

However, this policy change faced legal challenges. In November 2022, the High Court reinstated the ban on GMOs pending the determination of cases filed by various organizations, citing concerns over public participation and potential

²⁵ Ibid, Regulation 7(2)

²⁶ AP (2022) 'Kenya 'effectively' lifts ban on genetically modified crops' available at <https://apnews.com/article/technology-science-droughts-genetics-kenya-ced6a38a8270b57835da62292604ae81> accessed 1 November 2024

²⁷ ibid

²⁸ ibid

health risks.²⁹ The Attorney General of Kenya appealed the High Court order, arguing that Kenya already has regulatory frameworks in place and that the ruling infringed on Kenyans' rights to trade and consume GMO products.³⁰ On March 31, 2023, the Court of Appeal denied a stay, upholding the ban on GMO cultivation and importation. The court maintained that the High Court's order restored the previous status quo and directed that the appeal be prioritized for hearing.³¹

These developments underscore the dynamic interplay between policy decisions and legal frameworks in Kenya's approach to GMOs, reflecting ongoing debates over biotechnology's role in addressing food security and environmental sustainability.³²

3. Legal Gaps and Practical Problems of the Current Regulation of GMOs in Kenya

3.1 Ultra Vires Nature of the Cabinet Decision Lifting the GMOs Moratorium

The Cabinet's decision in October 2022 to lift the decade-long moratorium on genetically modified organisms (GMOs) in Kenya has raised significant legal concerns regarding its authority and adherence to established legal frameworks.

3.1.1 Lack of Statutory Authority

The Biosafety Act, 2009, establishes the National Biosafety Authority (NBA) as the primary regulatory body responsible for overseeing all activities related to GMOs in Kenya. Sections 5 and 7 of the Act empower the NBA to regulate the development, transfer, handling, and use of GMOs, ensuring safety to human

²⁹ *Mwangi & another v Attorney General & 3 others; Kenya University Biotechnology Consortium (KUBICO) & 2 others* (Interested Parties) (Constitutional Petition E475 of 2022 & Petition E519 of 2022 (Consolidated)) [2023] KEHC 3943 (KLR) (Constitutional and Human Rights) (28 April 2023) (Ruling).

³⁰ *Attorney General, National Biosafety Authority & 2 others vs Paul Mwangi & 4 others*, Constitutional Petition No. E519 OF 2022 as Consolidated with Constitutional Petition No. E475 of 2022, Civil Appeal (Application) No. E474 Of 2022 (Ruling).

³¹ *ibid*

³² Munyu M, Weru T and Odhiambo A, 'GMO Adoption in Kenya: Navigating Legal Challenges and Embracing Change' (DLA Piper Africa / IKM Advocates, 4 June 2025) <https://www.dlapiperafrica.com/en/kenya/insights/2025/gmo-adoption-in-kenya-navigating-legal-challenges-and-embracing-change> accessed 11 January 2026.

health and the environment. The Cabinet's unilateral decision to lift the moratorium bypassed the NBA's statutory mandate, raising questions about the legality of such an executive action without proper legislative backing.³³

3.1.2 Violation of Public Participation Principles

The Constitution of Kenya, under Article 10(2)(a), enshrines public participation as a national value and principle of governance³⁴. The sudden lifting of the GMO ban without adequate public consultation contravenes this constitutional requirement, undermining the democratic process and potentially eroding public trust in governmental decisions.³⁵

3.1.3 Inconsistency with International Obligations

Kenya is a signatory to the Cartagena Protocol on Biosafety, which emphasizes the precautionary approach in GMO regulation³⁶. The Cabinet's decision to lift the moratorium without comprehensive risk assessments and stakeholder engagement may be viewed as inconsistent with Kenya's international commitments to biosafety and environmental protection.³⁷

3.1.4 Judicial Interventions Highlighting Legal Concerns

The High Court's reinstatement of the GMO ban in November 2022, pending the determination of cases filed by various organizations, underscores the legal ambiguities surrounding the Cabinet's decision³⁸. The court cited concerns over public participation and potential health risks, reflecting the judiciary's role in upholding constitutional and statutory provisions.³⁹

³³ Mmbando, G. S. (2023). The legal aspect of the current use of genetically modified organisms in Kenya, Tanzania, and Uganda. *GM Crops & Food*, 14(1), 1-12.

³⁴ Constitution of Kenya, 2010, Article 10(2)(a)

³⁵ Mmbando, G. S. (2023). The legal aspect of the current use of genetically modified organisms in Kenya, Tanzania, and Uganda. *GM Crops & Food*, 14(1), 1-12.

³⁶ The Cartagena Protocol on Biosafety to the Convention on Biological Diversity, 2003

³⁷ Mmbando, G. S. (2023). The legal aspect of the current use of genetically modified organisms in Kenya, Tanzania, and Uganda. *GM Crops & Food*, 14(1), 1-12.

³⁸ *ibid*

³⁹ *ibid*

3.2 Overlaps of the Biosafety Act with the Environmental Management and Coordination Act (EMCA)

The regulation of GMOs in Kenya reveals significant overlaps between the Biosafety Act, 2009 and the Environmental Management and Coordination Act (EMCA), 1999,⁴⁰ creating duplication and regulatory conflicts that hinder efficient GMO management. Key points include:

❖ Environmental Risk Assessment (ERA) vs. Environmental Impact Assessment (EIA):

The Biosafety Act mandates an Environmental Risk Assessment (ERA) for GMO activities to assess potential risks to health and the environment. In contrast, EMCA, under its Second Schedule, classifies biotechnology developments, including GMO introductions, as “high-risk” projects, requiring an Environmental Impact Assessment (EIA) before approval. This duplication complicates the process, causing delays and redundancies.⁴¹

❖ Jurisdictional Conflicts between NBA and NEMA

The National Biosafety Authority (NBA), created by the Biosafety Act, is the designated body for regulating GMOs. However, EMCA gives the National Environment Management Authority (NEMA) authority over environmental assessments, including those involving GMOs. This overlap leads to jurisdictional conflicts, with both agencies requiring separate assessments for the same GMO projects, thus complicating regulatory compliance for stakeholders.⁴²

❖ Impact of Regulatory Duplication

The overlap creates bottlenecks in GMO research and commercialization by imposing additional regulatory requirements without clear added value, stifling the development process and potentially discouraging investment in biotechnology. Moreover, the requirement for dual assessments is costly and

⁴⁰ Environmental Management and Coordination Act (EMCA), 1999

⁴¹ Open Forum on Agricultural Biotechnology in Africa (2020) ‘Regulating Genetically Modified Organisms (GMOs) in Kenya: Overlap between the Biosafety Act and Environmental Management and Co-ordination Act’ available at <https://africenter.isaaa.org/wp-content/uploads/2020/10/Overlap-between-EMCA-Act-and-Biosafety-Act.pdf> accessed 2 November 2024

⁴² *ibid*

time-consuming for applicants.⁴³

❖ **Recommendations for Resolving the Overlap:**

Harmonizing the roles of NBA and NEMA by potentially removing GMO activities from EMCA's high-risk EIA requirements and recognizing the ERA conducted by NBA could streamline processes. Additionally, enhancing coordination between NBA and NEMA to validate ERA findings as sufficient evidence of environmental safety can further reduce regulatory redundancy.⁴⁴ This overlap highlights the need for legal reform to clarify agency roles, eliminate duplicative requirements, and facilitate an efficient, science-based GMO regulatory framework in Kenya.⁴⁵

3.3 Capacity Gaps and Deference to Biotechnology Developers

Kenya's regulatory framework for genetically modified organisms (GMOs) faces significant challenges due to capacity limitations within oversight bodies and an overreliance on biotechnology developers.⁴⁶

3.3.1 Limited Technical Expertise

The National Biosafety Authority (NBA), established under the Biosafety Act of 2009, is tasked with overseeing GMO activities. However, the NBA often lacks sufficient technical expertise and resources to conduct independent risk assessments and monitoring. This deficiency hampers its ability to effectively evaluate the safety and environmental impact of GMOs.⁴⁷

3.3.2 Dependence on Developer-Provided Data

Due to these capacity constraints, the NBA frequently depends on data and risk assessments provided by biotechnology developers. This reliance raises concerns

⁴³ *ibid*

⁴⁴ *ibid*

⁴⁵ *ibid*

⁴⁶ Catherine, K. N., Mugiira, B. R., & Muchiri, N. J. (2024). Public perception of genetically modified organisms and the implementation of biosafety measures in Kenya. *Advances in Agriculture*, 2024(1), 5544617.

⁴⁷ *ibid*

about potential conflicts of interest and the impartiality of safety evaluations, as developers may have vested interests in the approval of their products.⁴⁸

3.3.3 Inadequate Infrastructure for Monitoring and Enforcement

Effective regulation requires robust infrastructure for monitoring GMO cultivation, distribution, and consumption. Currently, Kenya lacks comprehensive systems for tracking GMOs, making it challenging to enforce compliance and respond to potential adverse effects.⁴⁹

3.3.4 Insufficient Public Engagement and Transparency

The capacity gaps extend to public engagement efforts. Limited resources and expertise hinder the NBA's ability to conduct widespread public awareness campaigns, leading to a lack of informed public discourse on GMOs. This deficiency undermines transparency and public trust in the regulatory process.⁵⁰

3.3.5 Recommendations

Addressing these capacity gaps is crucial for strengthening Kenya's GMO regulatory framework. Investing in technical training for regulatory staff, developing independent risk assessment capabilities, and establishing robust monitoring systems are essential steps. Additionally, fostering public engagement through education and transparent communication can enhance trust and ensure that GMO regulation aligns with public interest and safety.⁵¹

3.4 Limited Public Awareness

A significant challenge in Kenya's regulation of genetically modified organisms (GMOs) is the limited public awareness and understanding of biotechnology and its implications.⁵²

⁴⁸ *ibid*

⁴⁹ *ibid*

⁵⁰ *ibid*

⁵¹ *ibid*

⁵² Muchiri, J. N., Mutui, T. M., & Ogoyi, D. O. (2020). Kenya – a review of regulation of genetically modified organisms (GMOs) – case study of Kenya. *GMOs: Implications for Biodiversity Conservation and Ecological Processes*, 481-493.

3.4.1 Insufficient Public Education Initiatives

Despite the establishment of the National Biosafety Authority (NBA) under the Biosafety Act of 2009, efforts to educate the public about GMOs have been inadequate. The NBA's mandate includes promoting public awareness and participation in biosafety matters; however, resource constraints and limited outreach programs have hindered effective dissemination of information.⁵³

3.4.2 Prevalence of Misinformation

The lack of comprehensive public education has created a vacuum often filled by misinformation and myths about GMOs. A study by the Alliance for Science found that between October 2022 and January 2023, 40% of GMO-related stories in Kenyan media contained anti-GMO misinformation, making it challenging for citizens to make informed decisions.⁵⁴

3.4.3 Limited Public Participation in Decision-Making

The Constitution of Kenya emphasizes public participation as a national value⁵⁵. However, the limited awareness of GMOs has resulted in minimal public engagement in policy-making processes related to biotechnology. This gap undermines the democratic process and may lead to public resistance against GMO initiatives.⁵⁶

3.4.4 Recommendations

To address these issues, it is essential to implement comprehensive public education campaigns that provide accurate and balanced information about GMOs. Leveraging various media platforms, including radio, which has a wide

⁵³ *ibid*

⁵⁴ Rose Mukonyo (2023) 'GMO misinformation: It will be difficult for Kenyans to make informed decisions and that could cost lives' *Alliance for Science* available at <https://allianceforscience.org/blog/2023/02/gmo-misinformation-it-will-be-difficult-for-kenyans-to-make-informed-decisions-and-that-could-cost-lives-now-and-in-the-future/> accessed 2 November 2024

⁵⁵ Constitution of Kenya, 2010, art 10

⁵⁶ Muchiri, J. N., Mutui, T. M., & Ogoyi, D. O. (2020). Kenya – a review of regulation of genetically modified organisms (GMOs) – case study of Kenya. *GMOs: Implications for Biodiversity Conservation and Ecological Processes*, 481-493.

reach in Kenya, can enhance the effectiveness of these campaigns. Additionally, involving community leaders and stakeholders in outreach programs can foster trust and facilitate informed public participation in GMO-related decision-making processes.⁵⁷

4. The South African Supreme Court of Appeal Judgment in *African Centre for Biodiversity NPC v Minister of Agriculture, Forestry and Fisheries and Others: Lessons for Kenya*

4.1 Facts of the Case

In *African Centre for Biodiversity NPC v Minister of Agriculture, Forestry and Fisheries and Others* [2024] ZASCA 143,⁵⁸ the appellant, African Centre for Biodiversity (ACB), challenged the decision of South African authorities to approve Monsanto South Africa's application for the general release of a genetically modified maize variety, MON87460. ACB argued that the regulatory bodies namely the Executive Council, Appeal Board, and Minister failed to critically evaluate Monsanto's claims regarding the GMO's safety and efficacy.

The core argument presented by ACB was that these authorities uncritically accepted all data and claims submitted by Monsanto regarding MON87460. This data included risk assessments for human and animal health, allergenicity, and environmental impact. ACB contended that the respondents did not conduct an independent and thorough examination of the GMO, as required by the precautionary principle enshrined in the National Environmental Management Act (NEMA).⁵⁹

ACB further emphasized that the respondents failed to trigger an environmental impact assessment under Section 5(1)(a) of the Genetically Modified Organisms Act, despite concerns about environmental and health risks associated with MON87460. The appeal highlighted that the Executive Council's reliance on

⁵⁷ *ibid*

⁵⁸ *African Centre for Biodiversity NPC v Minister of Agriculture, Forestry and Fisheries and Others* [2024] ZASCA 143

⁵⁹ *Ibid*, paragraphs [10]– [11]

Monsanto's data, without independent verification or assessment of potential risks, constituted a violation of due process in GMO regulation.⁶⁰

4.2 Key Findings of the Supreme Court of Appeal

The Supreme Court of Appeal (SCA) in *African Centre for Biodiversity NPC v Minister of Agriculture, Forestry and Fisheries and Others* made critical findings regarding the regulatory bodies' approach to Monsanto's application for the general release of MON87460, a genetically modified maize.

❖ Application of the Precautionary Principle

The SCA emphasized that the precautionary principle should have guided the decision-making processes of the Executive Council, the Appeal Board, and the Minister. This principle, central to environmental law, mandates cautious action in the face of potential environmental harm, especially where scientific certainty is lacking. The court underscored that the regulatory bodies failed to apply this principle adequately, accepting Monsanto's safety data without further verification or consideration of possible environmental or health risks.⁶¹

❖ Failure to Determine Need for an Environmental Impact Assessment (EIA)

The SCA found that the Executive Council did not consider whether an environmental impact assessment was necessary as required under Section 5(1)(a) of the Genetically Modified Organisms Act. There was no evidence that the Executive Council evaluated the need for an EIA, which could have provided a more comprehensive assessment of the GMO's environmental impact. This omission contravened a mandatory requirement of the Act, rendering the decision to approve MON87460 procedurally flawed.⁶²

❖ Reconsideration of Monsanto's Application

Consequently, the SCA ruled that the decision to approve MON87460's general

⁶⁰ Ibid, paragraphs [20]- [24]

⁶¹ Ibid, paragraphs [10]- [11], [18]- [21]

⁶² Ibid, paragraphs [22]- [24]

release was invalid. The court set aside the approvals granted by the Executive Council, the Appeal Board, and the Minister, ordering that Monsanto's application be returned to the Executive Council for reconsideration. This judgment reaffirms the need for regulatory bodies to exercise independent oversight and apply due diligence in GMO assessments.⁶³

4.3 Lessons for Kenya on the Regulation of GMOs

4.3.1 Centrality of the Precautionary Principle

The *African Centre for Biodiversity NPC v Minister of Agriculture, Forestry and Fisheries and Others* judgment emphasizes the critical role of the precautionary principle in GMO regulation, highlighting valuable lessons for Kenya:

❖ Risk-Aversion and Caution:

The judgment demonstrates the importance of **risk-aversion** when dealing with GMOs, particularly where scientific certainty is lacking. The precautionary principle, enshrined in international environmental law, requires that decision-makers take preventive action in the face of uncertain risks to human health or the environment. For Kenya, this suggests a need to embed risk-averse processes in GMO regulation, ensuring that any potential harm is addressed before authorizing GMO use or release.⁶⁴

❖ Independent Verification of Risk Assessments:

The case revealed the pitfalls of uncritically relying on data provided by GMO developers. Kenya's regulatory framework should require independent verification of risk assessments provided by biotechnology companies. This approach would align with the precautionary principle by subjecting applications to rigorous scrutiny, ensuring that public and environmental safety is not compromised by potential conflicts of interest.⁶⁵

⁶³ Ibid, paragraph [25]

⁶⁴ Kojo, K. Y. K., & Dormatey, R. (2024). Cross-Sectional View of Genetically Modified Organisms (GMOs) in Africa. Available at SSRN 4871368.

⁶⁵ ibid

❖ Requirement for Environmental and Socio-Economic Impact Assessments:

The decision underlined the necessity of assessing environmental and socio-economic impacts. For Kenya, implementing mandatory Environmental Impact Assessments (EIAs) for GMO releases can safeguard against unforeseen consequences, ensuring a comprehensive review of risks.⁶⁶

By integrating the precautionary principle as a foundational element of GMO regulation, Kenya can foster a regulatory environment that is both scientifically grounded and protective of health and ecological integrity, establishing a model of cautious, responsible GMO management.⁶⁷

4.3.2 Reform to Ensure Legislative Clarity

The South African case *African Centre for Biodiversity NPC v Minister of Agriculture, Forestry and Fisheries and Others* underscore the importance of legislative clarity in GMO regulation, offering critical insights for Kenya's regulatory framework.

❖ Clear Roles and Responsibilities

The South African judgment highlighted confusion over the respective roles of regulatory bodies, resulting in an inadequate assessment of Monsanto's application. Kenya could benefit from reforms that clearly delineate the roles and responsibilities of institutions involved in GMO regulation, such as the National Biosafety Authority (NBA) and the National Environment Management Authority (NEMA), to avoid overlaps and ensure a streamlined decision-making process.⁶⁸

❖ Explicit EIA Requirements for GMOs

The case demonstrated the importance of a transparent and well-defined requirement for Environmental Impact Assessments (EIAs). In Kenya, the

⁶⁶ ibid

⁶⁷ Lekula DL, 'Ethical and Legal Perspectives of Genetically Modified Foods in Addressing Climate Change' (SSRN 5231562, 2024) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5231562 accessed 11 January 2026.

⁶⁸ ibid

Biosafety Act and related regulations could be amended to explicitly mandate EIAs for GMO releases, ensuring that such assessments are integral to the regulatory process and are consistently applied.⁶⁹ This approach would prevent ambiguity around whether an EIA is required, as witnessed in the South African case.

❖ **Incorporation of the Precautionary Principle in Legislation**

Embedding the precautionary principle directly within Kenyan legislation governing GMOs would guide regulatory bodies to adopt a cautious and risk-averse approach when assessing applications. This inclusion would provide a clear, legally backed basis for rejecting applications that lack sufficient data on potential risks.⁷⁰

❖ **Consistency Across Legal Frameworks**

Ensuring that all relevant legislation, such as the Biosafety Act and Environmental Management and Coordination Act (EMCA), aligns in their treatment of GMO regulation would further enhance clarity. Harmonized laws would help avoid regulatory gaps and foster a cohesive framework for biosafety governance.⁷¹

By establishing clear legislative mandates, Kenya can prevent procedural issues and ensure that its GMO regulation is both robust and legally unambiguous, facilitating effective governance and public trust in biotechnology management.

4.3.3 Standard Operating Procedures for the National Biosafety Authority

The South African case offers important insights for Kenya on the need for well-defined Standard Operating Procedures (SOPs) within the National Biosafety Authority (NBA) to enhance transparency, consistency, and accountability in GMO regulation:

❖ **Clear Decision-Making Criteria:**

The case underscores the need for the NBA to develop SOPs that outline precise

⁶⁹ *ibid*

⁷⁰ *ibid*

⁷¹ *ibid*

criteria and steps for reviewing GMO applications. These SOPs should specify what constitutes adequate risk assessments, data validation processes, and how to assess the sufficiency of information provided by applicants. Clear criteria reduce subjectivity and help ensure that all GMO applications are consistently evaluated, minimizing risks of uncritical acceptance of developer-provided data.⁷²

❖ **Precautionary Measures Embedded in SOPs:**

SOPs should explicitly integrate the precautionary principle as a foundational element in GMO assessment. This would ensure that NBA staff are required to adopt a cautious approach, particularly when faced with uncertain or inconclusive scientific data. Codifying precautionary measures in SOPs will guide NBA staff to demand thorough risk assessments and environmental impact studies before approving applications.⁷³

❖ **Protocols for Independent Verification:**

SOPs should mandate independent verification of risk assessments submitted by applicants. This can be done by specifying procedures for NBA to consult with independent experts or external scientific bodies for a second opinion on potential environmental and health impacts. Having structured verification protocols can prevent over-reliance on data from GMO developers and improve the credibility of NBA's regulatory decisions.⁷⁴

❖ **Public Participation and Transparency:**

SOPs should outline clear procedures for public notification and stakeholder engagement. This includes timelines for publishing GMO applications, inviting public comments, and transparently documenting how public feedback is considered in the final decision. By formalizing public participation, the NBA can enhance transparency and trust in the GMO regulatory process.⁷⁵

⁷² Sadikiel Mmbando, G. (2024). The Adoption of Genetically Modified Crops in Africa: the Public's Current Perception, the Regulatory Obstacles, and Ethical Challenges. *GM Crops & Food*, 15(1), 1-15.

⁷³ *ibid*

⁷⁴ *ibid*

⁷⁵ *ibid*

❖ **Regular Training and Capacity-Building:**

Developing SOPs should also go hand-in-hand with training NBA staff on best practices and risk assessment techniques. Regular training ensures that NBA personnel stay updated on biosafety standards and emerging GMO technologies, improving the overall rigor of GMO regulation.⁷⁶

Establishing comprehensive SOPs can empower the NBA to manage GMO applications more effectively, fostering a regulatory environment that is consistent, scientifically sound, and responsive to public and environmental concerns.⁷⁷

4.3.4 Prioritization of Public Participation

The South African case *African Centre for Biodiversity NPC v Minister of Agriculture, Forestry and Fisheries and Others* highlights the importance of public participation in the regulation of GMOs. This principle offers several critical lessons for Kenya's approach to GMO regulation:

❖ **Mandated Public Involvement in Decision-Making**

Kenya's regulatory framework would benefit from explicitly mandating public participation at each stage of GMO assessment and approval. This could involve requiring the National Biosafety Authority (NBA) to provide detailed notices about GMO applications, outlining potential environmental and health impacts, and opening them for public review. Structured public involvement can help identify potential concerns that may not be evident from scientific data alone, encouraging more holistic decision-making.⁷⁸

⁷⁶ *ibid*

⁷⁷ Muturi M, 'Synthetic Biology Regulatory Opportunities and Gaps in Kenya: Expert Perspectives and Expectations' (Zenodo, CERN European Organization for Nuclear Research, 2022) <https://zenodo.org/record/7002182> accessed 11 January 2026.

⁷⁸ Mmbando, G. S., & Ngongolo, K. (2024). The current status of the use of genetic modification and editing to improve biodiversity and ecological sustainability. *All Life*, 17(1), 2417191.

❖ Accessible Public Information

Ensuring that information about GMO applications is easily accessible to the public is essential for meaningful participation. The NBA should consider making application details, risk assessments, and regulatory decisions available through multiple platforms, such as an online portal, community notices, and public meetings. By making this information transparent and accessible, the NBA can enhance public trust and allow citizens to make informed contributions.⁷⁹

❖ Inclusion of Diverse Stakeholders

Public participation should actively involve diverse stakeholders including local communities, environmental groups, farmers' associations, and public health organizations. Engaging a wide range of perspectives ensures that various societal interests are represented, allowing for a more inclusive and balanced approach to GMO regulation.⁸⁰

❖ Documenting and Addressing Public Feedback

To demonstrate that public input is valued, the NBA should develop processes for documenting, addressing, and publicly responding to feedback. This could include summaries of comments received, responses to major concerns raised, and explanations of how feedback influenced final decisions. Such transparency can prevent public scepticism by showing that concerns are genuinely considered in the regulatory process.⁸¹

❖ Building Public Awareness on GMOs

For effective participation, the public must have a basic understanding of GMOs and the related risks and benefits. The NBA should thus invest in public education initiatives to inform citizens about GMO technology, biosafety regulations, and potential environmental impacts. Educated citizens are better positioned to participate meaningfully in decision-making processes.⁸²

⁷⁹ *ibid*

⁸⁰ *ibid*

⁸¹ *ibid*

⁸² *ibid*

By prioritizing public participation, Kenya can ensure that its GMO regulatory framework reflects public values and concerns, fostering a transparent, democratic approach to biosafety governance that aligns with environmental and societal priorities.⁸³

Conclusion

The regulation of GMOs in Kenya stands at a pivotal juncture, with the recent Cabinet decision to lift the GMO ban underscoring urgent gaps in the current legal framework. This paper has highlighted the critical need for a regulatory approach rooted in precaution, transparency, and public accountability to protect the health, environment, and socioeconomic interests of Kenyan society. Drawing lessons from the South African Supreme Court of Appeal's judgment in *African Centre for Biodiversity NPC v Minister of Agriculture, Forestry and Fisheries and Others*, Kenya can benefit from reforms that ensure rigorous risk assessments, mandate independent verifications, and prioritize public participation in GMO decision-making.

To move forward, Kenya should reinforce the role of the National Biosafety Authority with clear operating procedures, eliminate overlapping mandates, and align its biosafety legislation with the precautionary principle. Additionally, meaningful public engagement and transparent processes are vital to foster trust in GMO regulation and to reflect the diverse interests of Kenyan communities. By adopting these reforms, Kenya can establish a resilient and responsible biosafety framework that supports technological advancement while safeguarding the rights and well-being of its citizens.

⁸³ Nkrote CK, Mugiira BR and Muchiri NJ, 'Public Perception of Genetically Modified Organisms and the Implementation of Biosafety Measures in Kenya' (2024) 2024(1) *Advances in Agriculture* 5544617 <https://doi.org/10.1155/2024/5544617> accessed 11 January 2026.

References

African Centre for Biodiversity NPC v Minister of Agriculture, Forestry and Fisheries and Others [2024] ZASCA 143

AP (2022) 'Kenya 'effectively' lifts ban on genetically modified crops' available at <https://apnews.com/article/technology-science-droughts-genetics-kenya-ced6a38a8270b57835da62292604ae81>

Attorney General, National Biosafety Authority & 2 others vs Paul Mwangi & 4 others, Constitutional Petition No. E519 OF 2022 as Consolidated with Constitutional Petition No. E475 of 2022, Civil Appeal (Application) No. E474 Of 2022 (Ruling). Biosafety (Contained Use) Regulations, 2011

Biosafety (Environmental Release/Placing on the Market) Regulations, 2011

Biosafety (Import, Export and Transit) Regulations, 2011

Biosafety (Labelling) Regulations, 2012

Biosafety Act, 2009

Catherine, K. N., Mugiira, B. R., & Muchiri, N. J. (2024). Public perception of genetically modified organisms and the implementation of biosafety measures in Kenya. *Advances in Agriculture*, 2024(1), 5544617.

Cliffe Dekker Hofmeyr (2023) 'Agriculture, food security, and the regulation of GMOs in Kenya' *Agriculture, Aquaculture & Fishing Sector*

Constitution of Kenya, 2010

Environmental Management and Coordination Act (EMCA), 1999

Kojo, K. Y. K., & Dormatey, R. (2024). CROSS-SECTIONAL VIEW OF GENETICALLY MODIFIED ORGANISMS (GMOS) IN AFRICA. *Available at SSRN* 4871368.

Mmbando, G. S. (2023). The legal aspect of the current use of genetically modified organisms in Kenya, Tanzania, and Uganda. *GM Crops & Food*, 14(1), 1-12.

Mmbando, G. S., & Ngongolo, K. (2024). The current status of the use of genetic modification and editing to improve biodiversity and ecological sustainability. *All Life*, 17(1), 2417191.

Muchiri, J. N., Mutui, T. M., & Ogoyi, D. O. (2020). Kenya – a review of regulation of genetically modified organisms (GMOs) – case study of Kenya. *GMOs: Implications for Biodiversity Conservation and Ecological Processes*, 481-493.

Mwangi & another v Attorney General & 3 others; Kenya University Biotechnology

Consortium (KUBICO) & 2 others (Interested Parties) (Constitutional Petition E475 of 2022 & Petition E519 of 2022 (Consolidated)) [2023] KEHC 3943 (KLR) (Constitutional and Human Rights) (28 April 2023) (Ruling).

Open Forum on Agricultural Biotechnology in Africa (2020) 'Regulating Genetically Modified Organisms (GMOs) in Kenya: Overlap between the Biosafety Act and Environmental Management and Co-ordination Act' available at <https://africenter.isaaa.org/wp-content/uploads/2020/10/Overlap-between-EMCA-Act-and-Biosafety-Act.pdf>

Rose Mukonyo (2023) 'GMO misinformation: It will be difficult for Kenyans to make informed decisions and that could cost lives' *Alliance for Science* available at <https://allianceforscience.org/blog/2023/02/gmo-misinformation-it-will-be-difficult-for-kenyans-to-make-informed-decisions-and-that-could-cost-lives-now-and-in-the-future/>

Sadikiel Mmbando, G. (2024). The Adoption of Genetically Modified Crops in Africa: the Public's Current Perception, the Regulatory Obstacles, and Ethical Challenges. *GM Crops & Food*, 15(1), 1-15.

The Cartagena Protocol on Biosafety to the Convention on Biological Diversity, 2003

Conceptualizing the Meaning of Present Land Injustices in the Constitution of Kenya and Its Grasp by National Land Commission

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Abstract

Much of the legal and policy attention in Kenya has focused on historical land injustices claims, often at the expense of present land injustices that continue to affect communities today and shape their future. This article examines the National Land Commission's limited grasp on present land injustices in the absence of a clear statutory framework. It explores the transformative significance of land, the urgent need for legal reform, and the jurisdictional intersection between the National Land Commission and the Environment and Land Court. Ultimately, it proposes a statutory framework to guide the handling of present land injustice claims and enhance access to justice.

Introduction

The constitution of Kenya established the National Land Commission in article 67(1), which states; *"There is established the National Land Commission."*¹ On February 23rd 2012, about two years after the coming into force of the constitution, the National Land Commission began its operation and on May 2nd 2012, the National Land Commission Act commenced.² Alongside the provision, in the constitution, establishing the National Land Commission, was a provision giving it its functions, article 67(2).

These functions have extended into the National Land Commission Act in section 5 which is a *verbatim et literatim* of the functions in the constitution save for the

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¹ Constitution of Kenya 2010.

² <https://landcommission.go.ke/our-history/> - accessed on 25/06/2025.

additional roles in subsection 2. Among the functions was this two-sided function dealing with initiating investigations into Present and Historical Land Injustices. It provides “(e) to initiate investigations, on its own initiative or on a complaint, into present or historical land injustices, and recommend appropriate redress;”³ Following this provision, questions arise; has the National Land Commission looked into present land injustices? What guides it in dealing with present land injustices? Does this cause a clash of mandates between it and the Environment and Land Court?

In a bid to answer these questions, we will look at what present land injustice is, its relevance, what the National Land Commission has done about it, how they have handled its counterpart, historical land injustices, and finally, what the way forward is.

What are Present Land Injustices?

The term present land injustice is defined by the National Land Commission (Investigation of Historical Land Injustices) Regulations as grievance which occurred after 27th August, 2010.⁴ Despite the mere mention by definition, no provision has ever explicitly provided how such claims are to be dealt with, or what such claims entail, as they have for historical Land Injustice Claims in section 15 of National Land Commission Act.

It is important to note that at the very heart of jurisprudence exists the discussion about legal and social change, with scholars arguing that the discussion and the controversy about the law and its object are just the domain of jurisprudence and legal philosophy.⁵ It is without a doubt that law has, in most cases, evolved to

³ National Land Commission Act 2012; Article 67(2e) of The Constitution of Kenya.

⁴ National Land Commission, *The National Land Commission (Investigation of Historical Land Injustices) Regulations*, Legal Notice No. 258 of 2017, Kenya Gazette Vol. CXIX – No. 151 (13 October 2017) rule 3.

⁵ Massimo La Tore, ‘The Hierarchical Model and H.L.A Hart’s Conception of Law,’ (2013) 21 *Revus Online Les juristes et la hiérarchie des norms*.

address emerging societal needs.⁶ This, however, doesn't bar the law from effecting a change in norm to the people.⁷

Our Kenyan legal context on historical and present land injustices is no different from the civil rights legislation in the United States that sought to correct historical injustices faced by African Americans, just that the aforementioned Kenyan laws are retroactive and progressive than just barring a certain action.⁸ The framing of legal instruments arguably comprehensive on historical land injustices and less comprehensive in present land injustices, suggests that their definitions are more than mere definitions but avenues for adjudication.⁹ Section 15(2) of the National Land Act, as we have considered, defines historical land injustices cases by outlining what qualifies to be and what does not, and this was acknowledged in the case of *Gathoni Park Farm Limited v National Land Commission & 7 others* where the court held that section 15 of the National Land Commission Act is constitutional as it provides for guiding principles to the National Land Commission in efficiently and effectively discharging its mandate.¹⁰ That in itself speaks to a legal change, the provision came to address past injustices by showing what a valid claim is, that is: what qualifies and what does not.

The definition of Present Land Injustices as discussed, suggests more than just mere definition, thereby highlighting its incomprehensive nature. It backtracks land claims from today till 27th August 2010.¹¹ This is contrary to the normal

⁶ Atuegwu, Wisdom Tochukwu, LAW AS A TOOL FOR SOCIAL CHANGE: BRIDGING THE GAP BETWEEN JUSTICE AND EVERYDAY LIFE (November 22, 2024). SSRN: <https://ssrn.com/abstract=5265160> or <http://dx.doi.org/10.2139/ssrn.5265160>.

⁷ Galbiati R, Henry E, Jacquemet N and Lobeck M, 'How laws affect the perception of norms: Empirical evidence from the lockdown' (2021) *PLOS ONE* 16(9).

⁸ Ibid

⁹ Chacha Odera and Jonathan Kisia, 'Of Equal Importance: How The Courts Have Approached Substance and Procedure Considerations in Recent Judicial Review Proceedings' (Oraro & Company Advocates, 25 April 2024) <https://www.oraro.co.ke/of-equal-importance-how-the-courts-have-approached-substance-and-procedure-considerations-in-recent-judicial-review-proceedings/> >accessed 12 January 2026.

¹⁰ *Gathoni Park Farm Limited v National Land Commission & 7 others* [2019] eKLR.

¹¹ National Land Commission Act (n3).

claims on land which have a time limit of 12 years.¹² The right question at this stage then is, has Present Land Injustice been comprehensively defined? By virtue of the aforementioned, nay! How to navigate about it will form the scope of our discussion herein.

Why Present Land Injustices Claims?

Land is very important, its significance spans across various factors in life. Upon it, sat all the community, and upon it, they founded and conducted all their culture and tradition.¹³ Upon land, were raised and practised all economic plans and activities, that created integrality, and special governance settings, at localized levels, and on a wider scale, upon land, rested the organizing capacity and resources-muscle for political direction.¹⁴

Furthermore, its importance also extends to spirituality and values.¹⁵ An initial consideration of the American-Indians shows that they had two conceptions about land; A spiritual connection and a value-based significance. Certain areas, in the United States of America, are believed to be places where members of the tribe first came from the spirit world.¹⁶ Additionally, some tribes' cultures were based on sharing and distributions rather than individual accumulation.¹⁷ The Ogiek too claim to have a deeply intertwined religious connection with land.¹⁸ Their religious practices heavily connected to Mau Forest include; prayers, spiritual rituals and initiation ceremonies among others.¹⁹

Importantly, we cannot turn a blind eye to the fact that land has always held and

¹² Limitation of Actions Act CAP 22.

¹³ Patricia Kameri Mbote and Collins Odote (eds), *The Gallant Academic: Essays in Honour of HWO Okoth-Ogendo* (School of Law, University of Nairobi 2017).

¹⁴ Ibid.

¹⁵ Joseph William Singer *et al*, *Property Law: Rules, Policies and Practices* (8th edn, Wolters Kluwer 2021) 11

¹⁶ Ibid 11.

¹⁷ Ibid 12.

¹⁸ The Matter of African Commission on Human and Peoples' Rights v Republic of Kenya Application No. 006 of 2012.

¹⁹ Ibid.

continues to hold such great importance in other Kenyan communities too. From the sacred slopes of Mt. Kenya, believed by the Kikuyu to be the dwelling place of Ngai, to the six landmarks of Ramogi hills, though most are in a dilapidated condition, they are still decked with significances owing to the three-days yearly festivals.²⁰ Without forgetting the forest of the lost child among the Maasai, also known as *Entim e naimina-enkiyio*, still a place of multifaceted importance like its uniting, healing and educating significances.²¹

Land's importance today, doesn't end there, it extends through to the other stupendous significances like political interests as earlier observed. It is important to note that the reason for evicting the squatters in rift valley in the late 90s was a political reason.²² About thirty years later, the struggles between land governance and politics still exists. This is so, as institutional battles have been witnessed between the executive branch and the National Land Commission.²³ On April 9th 2024, the Land Laws Amendment Bill – which had Section 52 that proposed transferring the compulsory land acquisition role from the National Land Commission to the Cabinet Secretary for Lands – was withdrawn.²⁴ This development underscores the ongoing political dynamics influencing land governance in Kenya.

The supreme court of Kenya observed the importance of land, through a lens of

²⁰ Jacob Muhando, *Sacred Sites and Environmental Conservation: A Case Study of Kenya* (2005) 4(1) *Indilinga African Journal of Indigenous Knowledge Systems* 228–242; <https://www.standardmedia.co.ke/article/2001429692/luo-historical-site-in-ruins-despite-sh20m-disbursed-for-restoration> -Accessed on 29/06/2025.

²¹ Jacob Muhando (n18); <https://kubwaadvocates.com/insights/tourism-travel-and-tours/the-enchanted-loita-forest-of-the-lost-child-a-treasure-of-the-mara-ecosystem/> - Accessed on 29/06/2025.

²² A.M. Akiwumi, *Report of the Judicial Commission Appointed to Inquire into Tribal Clashes in Kenya* (The Commission, Nairobi 1999). 5.

²³ Mai Hassan and Kathleen Klaus, 'Closing The Gap: The Politics of Property Rights in Kenya' (2023) 75(2) *World Politics* 233–279 <https://dx.doi.org/10.1353/wp.2023.0008>.

²⁴ National Assembly, *Communication from the Chair No. 015 of 2024 on the Withdrawal of the Land Laws (Amendment) Bill (National Assembly Bill No. 65 of 2023)*, Third Session of the Thirteenth Parliament (22 April 2024).

four certain factors that have had a bearing on the land question, since the time of colonialism and are still relevant today.²⁵ They include: economy and the issues incidental thereto, land control and the issues incidental thereto, linkage between land and social structure and lastly land being secured on law for purposes of legitimacy and centrality.²⁶ The significance of land remains enduring and continues to manifest in diverse ways across generations. These importances have been an inspiration, motivation and push in ensuring all forms of land injustices have been done away with.

Our future is built today as the past informs the future, and how land disputes will be solved in the future is dictated by our present dealings.²⁷ On that note, how the National Land Commission deals with present land injustices claims today, will shape how its investigative power and mandate will be effectuated in the future, more so given that historical Land injustices have a limited timeframe. This can be noted from the dynamics around pre-amended section 15(11) of the National Land Commission Act,²⁸ Which initially stated: *(11) The provisions of this section shall stand repealed within ten years.* Section 3b National Land Commission Amendment Bill of 2023, then sought to make changes to the provision on its timeline.²⁹ Recently, the National Land Commission Amendment Act 2025, reduced the time limit to five years from the date of coming into force of that section³⁰.

When the dust of historical Land injustices settle, eyes will turn to present land injustices. Vigilant constitutional Lawyers will start looking into how that mandate is to be discharged in absence of a clear statutory framework. The ambiguity surrounding its effectuation, needs to be solved now. At the earliest

²⁵ National Land Commission v Attorney-General & 5 others; Kituo Cha Sheria & another (Amicus Curiae) [2015] KESC 3 (KLR) in par 115,117.

²⁶ Ibid.

²⁷ Marende Nyaundi, *Conceptualizing and Defining Historical Land Injustices: A Route Not Taken?* [Marende Nyaundi & Company Advocates, 2017]

²⁸ n3 National Land Commission Act.

²⁹ The National Land Commission (Amendment) Bill, 2023.

³⁰ National Land Commission (Amendment) Act 2025

instance. Necessity need not be the mother of invention; these are things we can act on now. Even better, they remain highly relevant today. Before delving into the framework, it is crucial to clearly distinguish the respective mandates of the National Land Commission in addressing present-day land injustices, and that of the Environment and Land Court.

National Land Commission vis-a-vis Environment and Land Court

The sole function of National Land Commission with regards present land injustices claims, is clearly spelled in the constitution, to investigate and make recommendations.³¹ Whereas that of the Environment and Land Court is to hear and determine disputes relating to environment, use, occupation of and title to land.³² The two mandates seem interrelated, and how far each stretch is highly relevant and worth considering. An overview of their origin and constitutional standing may give us a heads up in fully understanding their mandates.

Ex Nihilo Nihil fit, nothing comes from nothing. A look at the previous constitution proves non-existence of either the National Land Commission or Environment and Land Court under its constitutional dispensation. Neither do any of the previous Acts of Parliament show its existence then. In that case, establishing their historical foundations are critical to assessing their effectiveness in confronting present-day injustices.

The argument that specialized courts play a critical role in eliminating case backlogs, promoting judicial efficiency, and fostering subject-matter expertise – among other interconnected advantages – considered legally and practically sound, is raised in favour of Environment and Land Court.³³

Specialized courts have their own disadvantages though. One of the disadvantages include judicial isolation. This is where such judges, as specialists,

³¹ Article 67(2e) Constitution of Kenya.

³² Ibid Article 162(2b).

³³ Markus B Zimmer, 'Overview Of Specialized Courts' (2009) 2 *International Journal for Court Administration*; Okeyo Duke Omwenga, 'Access to Land Justice: An Overview of the Environment and Land Court in Kenya' (2021) 13 *International Journal of Court Administration*.

are considered not part of and do not easily fit in with the mainstream of generalist judges; they become a separate and distinct group unto themselves.³⁴ This can arguably be said was the repercussion in the case of *Karisa Chengo & 2 others v Republic*³⁵ where the court of appeal held that:

"We think that the act of the Chief Justice in appointing judges from the two specialized courts to hear matters specifically reserved for the High Court was conferring jurisdiction on these judges through Judicial craft and innovation the very vice that the Supreme Court warned against."

The narrowness of the work and the doctrinal isolation may make it difficult to attract the most talented and qualified jurists to specialized judicial careers.³⁶ This would undermine the very justice Environment and Land Courts aim to achieve. Moreso given that any present land injustice framework should be deeply rooted in the constitutional jurisdiction of Environment and Land Courts which includes use, title, and occupation to land.³⁷

Initially, the Ndung'u Commission report on illegal or irregular allocation of land proposed establishment of Land Disputes Tribunals to deal with the irregularly allocated titles to land. Something that had been occasioned by an imperial presidential power in the past. Its argument was that these tribunals would be a temporary expedient to be replaced by a formal "Rectification Court" along the lines of the industrial courts.³⁸ Though this report was not implemented, its influence was far reaching.³⁹ Afterwards, there was formation of the Environment and Land Court by the Constitution 2010, article 162(2b), and the Environment and Land Court Act.

³⁴ n33 Markus B Zimmer 'Overview of Specialized Courts.'

³⁵ *Karisa Chengo & 2 others v Republic* [2015] KECA 756 (KLR).

³⁶ n33 Markus B Zimmer 'Overview of Specialized Courts.'

³⁷ Article 162(2)(b) Constitution of Kenya 2010.

³⁸ Government of Kenya, *Report of the Commission of Inquiry into the Illegal/Irregular Allocation of Public Land* (June 2004) 70.

³⁹ *National Land Commission v Attorney General* 130 (n23).

The National Land Commission on the other hand, was formed because of the same reason. It was to address the challenges caused by an imperial president. The express recommendation for the repeal of Section 3 of the *Government Land Act*, as well as the provisions empowering the President, or the Commissioner of Lands to make grants of un-alienated Government land, shows a clear intent to de-link the Executive from dealings with public land.⁴⁰ It was the Commission's stand that to save public land, a separate entity from the Government (Executive) should be charged with the management of land in the country.⁴¹ This was actualized and confirmed in the case of *Republic v County Government of Kiambu & 2 others Ex-parte Kimani Gachungi*⁴² where it was held:

"there is now National Land Commission established under Article 67 of the Constitution and one of its functions is to manage public land on behalf of the national and county government. Article 62(2) of the Constitution provides that Public land shall vest in and be held by a county government in trust for the people resident in the county, and shall be administered on their behalf by the National Land Commission while under Article 62(3) thereof public land classified under clause (1) (f) to (m) shall vest in and be held by the national government in trust for the people of Kenya and shall be administered on their behalf by the National Land Commission."

The Commission was also mandated to address the land injustices that occurred between 15th June 1895, when Kenya became the British East African Protectorate, and 27th August 2010 when the Constitution of Kenya was promulgated.⁴³ It was also to address the injustices from 27th August 2010, and notably, the commission was vested with power to initiate investigations on its own motion.⁴⁴ In matters constitutional standing, some legal scholars propounded an argument that independent commissions, in which National Land Commission is part of,

⁴⁰ Ibid.

⁴¹ Ibid.

⁴² *Republic v County Government of Kiambu & 2 others Ex-parte Kimani Gachungi* [2014] eKLR.

⁴³ Section 15(2c) National Land Commission Act.

⁴⁴ n4 National Land Commission (Investigation of HLI) Regulations.

forms part of an arm of government referred to as the fourth arm of government. They refer to them as integrity branches and argue that the mere fact that the integrity branch is not one of the traditional Holy Trinity should not be enough to deprive it of its place in the modern separation of powers.⁴⁵ This argument has been adopted by some Kenyan legal scholars with the express mention of a fourth arm.⁴⁶

In light of the fourth arm concept, some strengthened the argument that the National Land commission is thus subject to the separation of powers principle.⁴⁷ The supreme court *In the Matter of the National Land Commission* (*supra*), slightly contradicted such assertions that there is a fourth arm of government on the basis of its source of power. It held that the independent commissions do not source their power from the people as the sacred tripartite, but was subject to separation of powers principle.⁴⁸ Is it that “in a multitude of people is the honour of the king, but the lack of people is the destruction of the prince?”⁴⁹ Does such apply? Given that the much-needed separation of powers principle was upheld, the more checks and balances the better for good governance.⁵⁰ In essence the supreme court was saying that the independent commissions are not part of the sacred tripartite but have a place in the modern separation of powers. What then is the status of independent commissions and offices? A watchdog theoretically deprived off a place in the sacred tripartite but practically accorded? How practical is the separation of powers principle in independent commissions?

⁴⁵ Bruce Ackerman, *The New Separation of Powers*, Harvard Law Review January 2000, Vol 113 number 3.

⁴⁶ Prof Ben Sihanya, JSD (Stanford) Scholar & Public Intellectual, Intellectual Property, Constitutionalism & Education Law University of Nairobi Law School & CEO Sihanya Mentoring & Innovative Lawyering *Constitutional implementation in Kenya, 2010-2015: Challenges and prospects A study under the auspices of the Friedrich Ebert Stiftung (FES) and University of Nairobi's Department of Political Science & Public Administration, Occasional Paper Serie* October 2011; Revised 4/12/11; 5/12/2012.

⁴⁷ The Lex Jotter in Law, ‘The Jurisdiction of Environment and Land Court vis-à-vis that of National Land Commission’ (22 September 2016).

⁴⁸ n23 NLC v Attorney General.

⁴⁹ Proverbs 14:28 KJV.

⁵⁰ In the Matter of the Speaker of the Senate & another [2013] eKLR.

The two bodies were established for different reasons and such reasons are still full of breath. While the Environment and Land Court was given the power to hear and make conclusive determinations, subject to appeals though, they don't have the same role with the National Land Commission. Each has its mandate, though they intertwine. The commission, while it should address present land injustices too, in this context it is to serve as people's constitutional watchdog.⁵¹ Article 249(1) of the Constitution acknowledges that. Should it then watch the Environment and Land Court?

Proposed Statutory Provision for Present Land Injustices (PLI)

The absence of a clear statutory framework regarding what constitutes present land injustices claims, save for the definition in section 2 of National Land Commission (Investigation of Historical Land Injustices) regulations, can cause unintended ambiguities. As a result, justice may not be attained hence undermining the spirit behind article 48 of the constitution in land matters. That means this legal lacuna must be addressed

1. Right to Land and non-discrimination

First and foremost, the most ideal provision in laying a comprehensive statutory framework is article 40 of the Constitution of Kenya. The framework should capture one's inalienable right to acquire and own property of any description. At the same time, it should guard against legislative provisions that unjustly deprive and limit a person's lawful ownership of property either on the basis of any discrimination stipulated in article 27 of the constitution, being discrimination on the basis of race, sex, pregnancy, marital status, ethnic or social origin, colour, age inter alia, or on the basis of power.⁵²

2. Jurisdiction

Since land injustices revolve around land ownership, occupation and title to land as contemplated in article 162(2)(b) of the constitution, it is imperative that the

⁵¹ In Re the Matter of the Interim Independent Electoral Commission (Constitutional Application No. 2 of 2011) [2011] KESC 1 (KLR).

⁵² Article 40 of the Constitution of Kenya; Article 27 of the Constitution of Kenya.

commission be limited to those issues only.⁵³

3. *Suo Moto provision and Natural Justice*

Since the commission is bequeathed with the authority to act as a quasi-judicial body, the framework should espouse ways in which the natural rules of justice are to be upheld. Of critical importance within the mandate of the National Land Commission in execution of this role, is the *Suo moto* provision, the power to initiate investigations on its own initiative as earlier observed. Moreso in extents where the land injustices are occasioned by a political elite who will silence any move to oust their unlawful ownership or occupation to land. In light of that, the *Suo moto* provision provided in the constitution should be reflected in the statutory provision.

4. Review of Judgements and Retrial Recommendations

Courts have asserted their position in comparison to that of the National Land Commission. The court in the case of *Mwangi Stephen Muriithi v National Land Commission & 3 others*⁵⁴ held that it “*has supervisory jurisdiction over the subordinate courts and over any person, body or authority exercising a judicial or quasi-judicial function.*” It is however worth noting that “*It is not for this Court to stand in the way of a quasi-judicial body lawfully discharging its constitutional mandate.*”⁵⁵

In respecting judicial authority and separation of powers, the National Land Commission thus cannot overrule whatever the courts have ruled. Courts too, as observed in the case above should not stand in the way of quasi-judicial bodies lawfully discharging their mandate, which the National Land Commission is part of. While that is the case, it is however worth noting that injustices are also perpetuated by other non-legal factors like poverty, illiteracy, poor infrastructure, and cultural practice.⁵⁶ Justice is broader than access to courts as founded in the western concept of law.⁵⁷ Injustice also surpasses violation of

⁵³ Article 162(2b) Constitution of Kenya;

⁵⁴ *Mwangi Stephen Muriithi v National Land Commission & 3 others* [2018] eKLR.

⁵⁵ *Ibid.*

⁵⁶ n30 Okeyo Duke Omwenga, ‘Access to Land Justice’.

⁵⁷ *Ibid.*

recognized rules and principles.⁵⁸ It is injustice also when much of suffering could have been prevented or minimized by less complacent public officials who fail to perform their duties diligently.⁵⁹

This is very critical, especially in cases pertaining to land whose importance is very proximate to life. Should a statutory framework for present land injustice, addressing the challenges raised above, encompass functions like that of the Miscarriage of Justice Commission of Canada? A guardian of the guardians bound by constitutional checks and balances. Helping in realization of justice by having the mandate to review, investigate, and recommend which cases should be returned to the justice system due to a potential miscarriage of justice but primarily considering challenges people had and have in accessing justice.⁶⁰

5. Time Limitation Clause

The prior proposed clause will sit well with the first step taken by section 2 of The National Land Commission (Investigation of Historical Land Injustices) Regulations which defines present land injustices as “grievance which occurred after 27th August, 2010.”⁶¹ The commission would have the mandate to review cases poorly adjudicated upon but barred by time constraints in the appeal process. However, if such will be the case, there will be a need for a regular update of the time limit in present land injustices. This is to prevent plaintiffs from prosecuting stale claims on the one hand, and on the other hand protect defendants after they had lost evidence or their defence from being disturbed after a long lapse of time.⁶²

⁵⁸ Bernard Yack, ‘Injustice and the Victim’s Voice’ (1991) 89 Mich L Rev 1449.

⁵⁹ *Ibid* Judges who are so lazy that they pay no attention to the witnesses who come before them, immigration officials who are so unpleasant to their clients that they scare them away from their offices, politicians who are so blind and insensitive that they never consider the indirect harm to oppressed minorities caused by the inflammatory rhetoric they use to get elected - all are passively unjust.

⁶⁰ <https://www.justice.gc.ca/eng/cj-jp/ccr-rc/cmc-cce.html> -Accessed on 3rd July 2025.

⁶¹ National Land Commission (Investigation of HLI) Regulations (n2).

⁶² Rawal vs. Rawal [1990] KLR Page 275.

Conclusion

In conclusion, there is an urgent need for a clear statutory framework to expand the legal pathways through which present land injustices can be addressed by the National Land Commission. Such a framework would strengthen the Commission's authority in eliminating land injustices and enable it to recommend redress for cases that were either poorly adjudicated or never adjudicated at all, often due to systemic barriers that limit access to justice.

Bibliography

Statutes and Subsidiary Legislation

Constitution of Kenya 2010

National Land Commission Act

National Land Commission (Amendment) Act 2025

National Land Commission Act (Investigation of Historical Land Injustices Regulation)

National Land Commission (Amendment) Bill 2023

Limitation of Actions Act CAP 22

Reports

A M Akiwumi, *Report of the Judicial Commission Appointed to Inquire into Tribal Clashes in Kenya* (The Commission, Nairobi 1999)

Government of Kenya, *Report of the Commission of Inquiry into the Illegal/Irregular Allocation of Public Land* (Government Printer, Nairobi 2004)

Parliamentary Communications

National Assembly, *Communication from the Chair No. 015 of 2024 on the Withdrawal of the Land Laws (Amendment) Bill* (National Assembly Bill No. 65 of 2023), Third Session of the Thirteenth Parliament (22 April 2024)

Websites

<https://landcommission.go.ke/our-history/> accessed on 25th June 2025

<https://www.standardmedia.co.ke/article/2001429692/luo-historical-site-in-ruins-despite-sh20m-disbursed-for-restoration> Accessed on 29th June 2025

<https://kubwaadvocates.com/insights/tourism-travel-and-tours/the-enchanted-loita-forest-of-the-lost-child-a-treasure-of-the-mara-ecosystem/>
Accessed on 29th June 2025

<https://www.justice.gc.ca/eng/cj-jp/ccr-rc/cmc-cce.html> -Accessed on 3rd August 2025

Chacha Odera and Jonathan Kisia, 'Of Equal Importance: How The Courts Have Approached Substance and Procedure Considerations in Recent Judicial Review Proceedings' (Oraro & Company Advocates, 25 April 2024)

<https://www.oraro.co.ke/of-equal-importance-how-the-courts-have-approached-substance-and-procedure-considerations-in-recent-judicial-review-proceedings/> >accessed 12 January 2026.

Thesis

Omwenga Okeyo Duke, 'Access to Land Justice: An Overview of the Environment and Land Court in Kenya' (2021) 13 *International Journal of Court Administration*

Cases

National Land Commission v Attorney-General & 5 others; Kituo Cha Sheria & another (Amicus Curiae) [2015] KESC 3 (KLR)

Karisa Chengo & 2 others v Republic [2015] KECA 756 (KLR)

Republic v County Government of Kiambu & 2 others Ex-parte Kimani Gachungi [2014] eKLR

In the Matter of the Speaker of the Senate & another [2013] eKLR

In the Matter of Interim Independent Electoral Commission [2011] eKLR

Mwangi Stephen Muriithi v National Land Commission & 3 others [2018] eKLR

Rawal vs. Rawal [1990] KLR Page 275

The Matter of African Commission on Human and Peoples' Rights v Republic of Kenya Application No. 006 of 2012.

Gathoni Park Farm Limited v National Land Commission & 7 others [2019] eKLR

Journals and Articles

Patricia Kameri Mbote and Collins Odote (eds), 'The Gallant Academic: Essays in Honour of HWO Okoth-Ogendo' (School of Law, University of Nairobi 2017). Joseph William Singer, Bethany R Berger, Nestor M Davidson and Eduardo Moisés Peñalver, 'Property Law: Rules, Policies and Practices' (8th edn, Wolters Kluwer 2021).

Jacob Muhando, 'Sacred Sites and Environmental Conservation: A Case Study of Kenya' (2005) 4(1) *Indilinga: African Journal of Indigenous Knowledge Systems* 228–242.

Mai Hassan and Kathleen Klaus, 'Closing The Gap: The Politics of Property Rights in Kenya' (2023) 75(2) *World Politics* 233–279.

Markus B Zimmer, 'Overview of Specialized Courts' (2009) 2(1) *International Journal for Court Administration* 46–60.

Massimo La Tore, 'The Hierarchical Model and H.L.A Hart's Conception of Law,' (2013) 21 *Revus Online Les juristes et la hiérarchie des norms*.

Atuegwu, Wisdom Tochukwu, *Law As a Tool for Social Change: Bridging the Gap Between Justice and Everyday Life* (November 22, 2024).

SSRN: <https://ssrn.com/abstract=5265160> or <http://dx.doi.org/10.2139/ssrn.5265160>

Galbiati R, Henry E, Jacquemet N and Lobeck M, 'How laws affect the perception of norms: Empirical evidence from the lockdown' (2021) *PLOS ONE* 16(9)

Bruce Ackerman, 'The New Separation of Powers', *Harvard Law Review* January 2000, Vol 113 number 3.

Ben Sihanya, 'Constitutional Implementation in Kenya, 2010–2015: Challenges and Prospects' (Friedrich Ebert Stiftung and University of Nairobi Department of Political Science & Public Administration, Occasional Paper Series, October 2011; revised 4 December 2011 and 5 December 2012).

The Lex Jotter in Law, 'The Jurisdiction of Environment and Land Court vis-à-vis that of National Land Commission' (22 September 2016).

Bernard Yack, 'Injustice and the Victim's Voice' (1991) 89(6) *Michigan Law Review* 1334–1349.

Marende Nyaundi, *Conceptualizing and Defining Historical Land Injustices: A Route Not Taken?* [Marende Nyaundi & Company Advocates, 2017]

Respect African Cultural Norms: Incorporating Traditional Ecological Knowledge into Current Environmental Education for Sustainability

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Abstract

This paper critically examines how environmental education can be strengthened in the African context by respecting African cultural norms. The paper argues that Traditional Ecological Knowledge (TEK) provides a viable and effective approach towards integrating African cultural norms into current environmental education for sustainability. The paper defines TEK. It observes that TEK has played a crucial role in fostering environmental education in Africa for many centuries by emphasizing harmony with nature. Despite its suitability in fostering sustainability, the paper notes that TEK is underutilised in current environmental education systems. It examines some of the challenges facing TEK in Africa. In light of these challenges, the paper discusses how TEK can be incorporated into current environmental education for sustainability.

1.0 Introduction

Environmental education is a process that helps individuals, communities and organizations to learn more about the environment, and develop skills and capacities that can help them address environmental problems at local, national, regional and global levels¹. Further, it has been observed that environmental education entails organized efforts to teach about the environment including ecosystems, natural processes and functions, and particularly how human beings

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¹ About Environmental Education and why it Matters., Available at <https://naaee.org/about/ee> (Accessed on 06/01/2026)

can live sustainably on Mother Earth². Environmental education has also been defined as a process that allows individuals to explore environmental issues, engage in environmental problem-solving, and take sustainable actions to protect and conserve the environment³.

Fostering environmental education is a key ideal in the pursuit of sustainability. For instance, the United Nations Environment Programme (UNEP) recognises that environmental education plays a fundamental role in capacity building, increasing access to policy making and facilitating participation towards a climate neutral, nature positive and pollution free future⁴. UNEP recognises environmental education as a continuous and lifelong process, based on interdisciplinary approaches, active participation and individual and group responsibility for the environment towards sustainability⁵. It has been observed that environmental education has the power to influence positive attitudes and motivate action towards protecting the environment for sustainability⁶. This process equips individuals, communities and organizations with skills, knowledge, positive attitudes and motivation to be responsible stewards of the environment⁷. By strengthening environmental education, it is possible to foster sound environmental governance and sustainability including through tackling

² United Nations Economic and Social Commission for Asia and the Pacific., 'Introduction to Environmental Education', Available at <https://www.unescap.org/sites/default/files/CH15.pdf> (Accessed on 06/01/2025)

³ United States Environmental Protection Agency., 'What is Environmental Education?' Available at <https://www.epa.gov/education/what-environmental-education> (Accessed on 06/01/2026)

⁴ United Nations Environment Programme., 'Youth, education and environment' Available at <https://www.unep.org/topics/youth-education-and-environment> (Accessed on 06/01/2026)

⁵ United Nations Environment Programme., 'UNEP strategy for Environmental Education and Training' Available at <https://www.unep.org/about-un-environment/policies-and-strategies/un-environment-strategy-environmental-education-and> (Accessed on 06/01/2026)

⁶ About Environmental Education and why it Matters., Op Cit

⁷ United Nations Economic and Social Commission for Asia and the Pacific., 'Introduction to Environmental Education', Op Cit

environmental challenges such as climate change, pollution, biodiversity loss, environmental degradation and resource scarcity⁸.

The role of environmental education as a pillar for sustainability has been recognised under several instruments. For example, the *Declaration of the United Nations Conference on the Human Environment (Stockholm Declaration)*⁹ urges all countries to strengthen environmental education. Principle 19 of the Stockholm Declaration acknowledges that the education in environmental matters, for the younger generation as well as adults, giving due consideration to the underprivileged, is essential in order to broaden the basis for an enlightened opinion and responsible conduct by individuals, enterprises and communities in protecting and improving the environment in its full human dimension for sustainability¹⁰. In addition, the *Convention on Biological Diversity*¹¹ emphasizes the importance of public education and awareness as a tool for conservation and sustainable use of biological diversity¹². Strengthening environmental education is therefore critical in the quest for sustainability.

This paper critically examines how environmental education can be strengthened in the African context by respecting African cultural norms. The paper argues that Traditional Ecological Knowledge (TEK) provides a viable and effective approach towards integrating African cultural norms into current environmental education for sustainability. The paper defines TEK. It observes that TEK has played a crucial role in fostering environmental education in Africa for many centuries by emphasizing harmony with nature. Despite its suitability in fostering sustainability, the paper notes that TEK is underutilised in current environmental education systems. It examines some of the challenges facing TEK in Africa. In light of these challenges, the paper discusses how TEK can be

⁸ Ibid

⁹ United Nations, Report of the United Nations Conference on the Human Environment., Stockholm, 5-16 June, 1972, A/CONF. 48/14/Rev. 1

¹⁰ Ibid

¹¹ Convention on Biological Diversity, 5 June 1992 (1760 U.N.T.S. 69)

¹² Ibid, article 13

incorporated into current environmental education for sustainability.

2.0 Traditional Ecological Knowledge and Environmental Education in Africa: Opportunities and Challenges

TEK has been defined as a cumulative body of knowledge, practices and beliefs, handed down from generation to generation by cultural transmission, which focuses on the relationship between living organisms (including humans) and their environment¹³. TEK has also been defined as the knowledge base acquired by indigenous peoples and local communities all over the world through direct contact with their environment for many centuries¹⁴. TEK has been also described as an evolving body of knowledge, practices, values and beliefs about the relationships between living beings and their environment, passed down through generations among indigenous and local communities¹⁵.

It has been observed that TEK stems from centuries-old observation and interaction with nature and is a valuable resource in ensuring sound environmental governance and conservation towards sustainability¹⁶. For example, TEK encompasses practical ways through which indigenous peoples and local communities ensure the balance of the environment in which they live, so that it may continue to provide ecosystem services such as water, fertile soil, food, shelter and medicines¹⁷. TEK has enabled indigenous peoples all over the world to conserve and sustainable manage natural resources and address

¹³ Traditional Ecological Knowledge., Available at <https://www.bia.gov/service/fuels-management/traditional-knowledge> (Accessed on 06/01/2026)

¹⁴ Traditional Ecological Knowledge., Available at https://www.edu.gov.mb.ca/k12/docs/support/sila_video/tek.pdf (Accessed on 06/01/2026)

¹⁵ Traditional Ecological Knowledge and Global Climate Change; A Global South Perspective on Climate Solutions., Available at <https://afo.or.tz/traditional-ecological-knowledge-and-global-climate-change-a-global-south-perspective-on-climate-solutions/> (Accessed on 06/01/2026)

¹⁶ United Nations Environment Programme., 'Indigenous Peoples and the nature they protect' Available at <https://www.unep.org/news-and-stories/story/indigenous-peoples-and-nature-they-protect> (Accessed on 06/01/2026)

¹⁷ Ibid

environmental challenges including climate change and biodiversity loss¹⁸. It has been argued that TEK has cultural, spiritual, ecological and social significance making it a dynamic and valuable knowledge base in the pursuit of sustainability¹⁹. UNEP acknowledges that mainstreaming TEK into all relevant policies and decision making processes can foster sound environmental governance including through tackling the triple planetary crisis of climate change, nature and biodiversity loss, and pollution and waste²⁰.

TEK is a valuable knowledge and resource base that can strengthen environmental education for sustainability. It has been observed that in the African context, TEK emphasizes harmony with nature enabling people all over the continent to live sustainably and protect the environment and natural ecosystems²¹. TEK upholds African cultural norms since it affirms that the universe is a spiritual and a material whole in which all beings are interrelated and interdependent²². According to this knowledge system, land, water, animals and plants and other natural resources are not just production factors with economic significance but an integral part of the universe which must be

¹⁸ International Fund for Agricultural Development., 'Indigenous Peoples' Available at <https://www.ifad.org/en/indigenous-peoples#:~:text=Indigenous%20Peoples%20are%20the%20custodians,investments%20based%20on%20their%20perspectives> (Accessed on 06/01/2026)

¹⁹ Johansson. G., & Kalorii. D., 'Traditional Ecological Knowledge (TEK) and Climate Change Adaptation: Bridging the Gap for Hydrological Resilience' Available at [https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5813243#:~:text=1.2%20Significance%20of%20Traditional%20Ecological%20Knowledge%20\(TEK\)&text=By%20integrating%20cultural%2C%20spiritual%2C%20and,%2C%20&%20Folke%2C%201993](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5813243#:~:text=1.2%20Significance%20of%20Traditional%20Ecological%20Knowledge%20(TEK)&text=By%20integrating%20cultural%2C%20spiritual%2C%20and,%2C%20&%20Folke%2C%201993). (Accessed on 06/01/2026)

²⁰ United Nations Environment Programme., 'Tapping into indigenous knowledge to protect nature' Available at <https://www.unep.org/news-and-stories/story/tapping-indigenous-knowledge-protect-nature> (Accessed on 06/01/2026)

²¹ Traditional Ecological Knowledge and Global Climate Change; A Global South Perspective on Climate Solutions., Op Cit

²² Owusu-Ansah. F., & Mji. G., 'African indigenous knowledge and research' Available at <https://pmc.ncbi.nlm.nih.gov/articles/PMC5442578/#:~:text=Indigenous%20knowledge%20or%20African%20knowledge,is%20collective%20and%20community%20oriented> (Accessed on 06/01/2025)

conserved and protected for the benefit of current and future generations²³. Due to its emphasis on harmony with nature, it has been pointed out that TEK offers vital insights into environmental conservation and sustainability in Africa²⁴. TEK is embedded in centuries of observation and cultural practices of the people of Africa and can therefore inform sustainable resource use and the protection of ecosystems for sustainability²⁵. For example, indigenous peoples and local communities in Africa have developed flexible, adaptive and resilient practices to cope with environmental variability unique to the continent including sustainable agricultural practices, sustainable hunting and fishing methods and sustainable ecosystem conservation practices tailored to local needs²⁶.

Integrating TEK into current environmental education in Africa can therefore foster sustainability including through respecting African cultural and spiritual norms that emphasize harmony with nature. It has been observed that incorporating TEK into environmental education enables individuals, communities and organizations to recognise and appreciate the interconnectedness between people and the environment²⁷. Through this, it is possible to foster inclusive, responsive and cultural-specific approaches that can strengthen environmental governance for sustainability²⁸. Further, TEK can

²³ Naamwintome. B.A., & Millar. D., 'Indigenous Knowledge and the African Way Forward: Challenges and Opportunities' Available at <https://www.scirp.org/journal/paperinformation?paperid=68164> (Accessed on 06/01/2026)

²⁴ Fa. J.E., & Luiselli; L., 'Weaving the Middle Spaces Between Indigenous and Scientific Knowledge for Biodiversity Conservation and Ecology' Available at <https://onlinelibrary.wiley.com/doi/10.1111/aje.70030?af=R> (Accessed on 06/01/2026)

²⁵ Ibid

²⁶ Traditional Ecological Knowledge and Global Climate Change; A Global South Perspective on Climate Solutions., Op Cit

²⁷ Kamarudin. Z., 'Teaching climate change grounded in traditional ecological knowledge (TEK)' Available at <https://voicesoftherainforest.leeds.ac.uk/teaching-climate-change-grounded-in-traditional-ecological-knowledge-tek/#:~:text=TEK%20integration%20encourages%20students%20to,Ogunniyi%20&%20Iwuanyanwu%2C%202024>). (Accessed on 06/01/2026)

²⁸ Ibid

allow for the integration of cultural and scientific knowledge, fostering sound environmental stewardship and creating more holistic environmental education experiences²⁹.

Despite its role in ensuring responsible environmental stewardship for sustainability, TEK has been underutilised in environmental education in Africa. For example, emphasis on modern scientific knowledge has resulted in TEK being marginalised and disregarded as inferior and unscientific³⁰. It has been argued that in predominantly Western-oriented education systems, policies, academic circles and investigations, the African voice is usually sidelined or suppressed because indigenous knowledge and methods are often ignored or not taken seriously³¹. As a result, the role of TEK in environmental education continues to be ignored. Further, since TEK is usually passed down orally from generation to generation, there is a threat of it being lost³². Consequently, preserving TEK in Africa is critical in bolstering its role in environmental education now and in the future.

In light of the foregoing concerns, it is imperative to incorporate TEK into current environmental education in order to respect and uphold African cultural norms for sustainability.

3.0 Incorporating Traditional Ecological Knowledge into Current Environmental Education for Sustainability

TEK is a valuable knowledge base that can strengthen environmental education for sustainability. It has been observed that indigenous and traditional practices are vital for the planet's future since they can provide vital insights in areas such as sustainable agriculture, ecosystem conservation and restoration, climate change mitigation and adaptation, controlling wildfires and protection of

²⁹ Ibid

³⁰ The African Manifesto for Science, Technology and Innovation., Available at https://atpsnet.org/wp-content/uploads/2017/05/the_african_manifesto_for_sti.pdf (Accessed on 06/01/2026)

³¹ Owusu-Ansah. F., & Mji. G., 'African indigenous knowledge and research' Op Cit

³² Ibid

endangered species³³. Therefore, if sustainably harnessed, TEK can play an important role in strengthening environmental education. TEK can bolster environmental education by providing holistic, culturally-appropriate and place-based perspectives that recognise the interconnectedness of all living species and emphasize harmony with nature³⁴.

Africa has a rich reservoir of TEK that is anchored in the cultural norms of the people of Africa. It has been observed that the African worldview embodies wholeness, community and harmony which are deeply embedded in cultural values³⁵. TEK in Africa affirms that the universe is a spiritual and a material whole in which all beings are interrelated and interdependent³⁶. By embracing this worldview, indigenous peoples and local communities in Africa have been able to live in harmony with nature for many centuries. Incorporating TEK into current environmental education in Africa is therefore necessary in quest towards sustainability.

It is therefore important to develop holistic environmental education frameworks in Africa that embrace TEK. Through this, it is possible to foster approaches and initiatives that are locally relevant and culturally-sensitive towards achieving sustainability³⁷. Further, it is imperative to foster synergies between TEK and modern scientific knowledge systems in Africa³⁸. It has been observed that

³³ United Nations Environment Programme., 'Tapping into indigenous knowledge to protect nature' Op Cit

³⁴ Traditional Ecological Knowledge: The Cornerstone of Indigenous Climate Adaptation in Canada., Available at <https://indigenousclimatehub.ca/tag/traditional-ecological-knowledge-tek/page/2/#:~:text=Understanding%20Traditional%20Ecological%20Knowledge,challenges%20posed%20by%20climate%20change>. (Accessed on 07/01/2026)

³⁵ Owusu-Ansah. F., & Mji. G., 'African indigenous knowledge and research' Op Cit

³⁶ Naamwintome. B.A., & Millar. D., 'Indigenous Knowledge and the African Way Forward: Challenges and Opportunities' Op Cit

³⁷ United Nations Environment Programme., 'UNEP strategy for Environmental Education and Training' Op Cit

³⁸ Johansson. G., & Kalorii. D., 'Traditional Ecological Knowledge (TEK) and Climate Change Adaptation: Bridging the Gap for Hydrological Resilience' Op Cit

mainstreaming TEK with modern science can ensure collaborative approaches that empower indigenous peoples and local communities, foster knowledge exchange between these two systems, and ensure that scientific approaches and practices respect the cultural norms and knowledge systems of the people of Africa³⁹.

In addition, it is imperative to uphold the rights of indigenous peoples and local communities in Africa in order to effectively harness TEK for sustainability. It has been observed that for many centuries, indigenous peoples and local communities have suffered grave human right violations including displacement from their lands and territories⁴⁰. This undermines their livelihoods and cultural practices including the use of TEK in environmental conservation⁴¹. Consequently, it has been observed that recognising and protecting the land rights of indigenous peoples is vital in bolstering their role in environmental protection, biodiversity conservation and climate action through their TEK⁴². Strengthening indigenous education in Africa is also vital towards incorporating TEK into current environmental education. For example, it has been observed that strengthening and formalizing indigenous education in Africa can make space for indigenous methods of knowing and learning and protect the intellectual heritage of mostly marginalised indigenous peoples and local communities⁴³.

There is also need for African governments to invest in cultural preservation. This is an effective strategy towards ensuring that TEK is not lost and can be passed

³⁹ Ibid

⁴⁰ United Nations Environment Programme., 'Indigenous Peoples and the nature they protect' Op Cit

⁴¹ Ibid

⁴² Ibid

⁴³ Harnessing Indigenous Knowledge Systems for Global Knowledge Cooperation., Available at https://www.idos-research.de/fileadmin/user_upload/pdfs/publikationen/aktuelle_kolumne/2024/German_Institute_of_Development_and_Sustainability_EN_Segueda_Banerjee_28.10.2024.pdf (Accessed on 07/01/2026)

to future generations for utilization in ecological conservation⁴⁴. Establishing knowledge bases for indigenous and local knowledge including through documenting oral traditions and cultural practices can ensure that TEK is preserved and transmitted to future generations for sustainability now and tomorrow⁴⁵.

4.0 Conclusion

TEK is a valuable resource that can strengthen environmental education in Africa. It is therefore important to incorporate this knowledge system into current environmental education in the continent including through strengthening indigenous education, upholding the rights of indigenous peoples and local communities, fostering synergies between TEK and modern science and investing in cultural preservation⁴⁶. Incorporating TEK into current environmental education is therefore an effective approach towards respecting and upholding African cultural norms for sustainability.

⁴⁴ Latief. A., 'Harnessing Indigenous Knowledge for Climate Change Resilience in Africa' Available at https://www.linkedin.com/pulse/harnessing-indigenous-knowledge-climate-change-africa-aatifah-latief/?utm_source=share&utm_medium=member_android&utm_campaign=share_via (Accessed on 07/01/2026)

⁴⁵ United Nations., 'Indigenous People's Traditional Knowledge Must Be Preserved, Valued Globally, Speakers Stress as Permanent Forum Opens Annual Session' Available at <https://press.un.org/en/2019/hr5431.doc.htm> (Accessed on 07/01/2026)

⁴⁶ Johansson. G., & Kalorii. D., 'Traditional Ecological Knowledge (TEK) and Climate Change Adaptation: Bridging the Gap for Hydrological Resilience' Op Cit

References

About Environmental Education and why it Matters., Available at <https://naaee.org/about/ee>

Convention on Biological Diversity, 5 June 1992 (1760 U.N.T.S. 69)

Fa. J.E., & Luiselli; L., 'Weaving the Middle Spaces Between Indigenous and Scientific Knowledge for Biodiversity Conservation and Ecology' Available at <https://onlinelibrary.wiley.com/doi/10.1111/aje.70030?af=R>

Harnessing Indigenous Knowledge Systems for Global Knowledge Cooperation., Available at https://www.idos-research.de/fileadmin/user_upload/pdfs/publikationen/aktuelle_kolumne/2024/German_Institute_of_Development_and_Sustainability_EN_Segueda_Bane_rjee_28.10.2024.pdf

International Fund for Agricultural Development., 'Indigenous Peoples' Available at <https://www.ifad.org/en/indigenous-peoples#:~:text=Indigenous%20Peoples%20are%20the%20custodians,investments%20based%20on%20their%20perspectives>

Johansson. G., & Kalorii. D., 'Traditional Ecological Knowledge (TEK) and Climate Change Adaptation: Bridging the Gap for Hydrological Resilience' Available at [https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5813243#:~:text=1.2%20Significance%20of%20Traditional%20Ecological%20Knowledge%20\(TEK\)&text=By%20integrating%20cultural%2C%20spiritual%2C%20and,%2C%20&%20Folke%2C%201993\)](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5813243#:~:text=1.2%20Significance%20of%20Traditional%20Ecological%20Knowledge%20(TEK)&text=By%20integrating%20cultural%2C%20spiritual%2C%20and,%2C%20&%20Folke%2C%201993))

Kamarudin. Z., 'Teaching climate change grounded in traditional ecological knowledge (TEK)' Available at <https://voicesoftherainforest.leeds.ac.uk/teaching-climate-change-grounded-in-traditional-ecological-knowledge-tek/#:~:text=TEK%20integration%20encourages%20students%20to,Ogunniyi%20&%20Iwuanyanwu%2C%202024>

Latief. A., 'Harnessing Indigenous Knowledge for Climate Change Resilience in Africa' Available at <https://www.linkedin.com/pulse/harnessing-indigenous->

[knowledge-climate-change-africa-aatifah-
latief/?utm_source=share&utm_medium=member_android&utm_campaign=s
hare_via](https://www.scribd.com/document/5442578/Indigenous-Knowledge-and-African-Way-Forward-Challenges-and-Opportunities)

Naamwintome. B.A., & Millar. D., 'Indigenous Knowledge and the African Way Forward: Challenges and Opportunities' Available at <https://www.scribd.com/document/5442578/Indigenous-Knowledge-and-African-Way-Forward-Challenges-and-Opportunities>

Owusu-Ansah. F., & Mji. G., 'African indigenous knowledge and research' Available at <https://pmc.ncbi.nlm.nih.gov/articles/PMC5442578/#:~:text=Indigenous%20knowledge%20or%20African%20knowledge,is%20collective%20and%20community%20oriented>

The African Manifesto for Science, Technology and Innovation., Available at https://atpsnet.org/wp-content/uploads/2017/05/the_african_manifesto_for_sti.pdf

Traditional Ecological Knowledge and Global Climate Change; A Global South Perspective on Climate Solutions., Available at <https://afo.or.tz/traditional-ecological-knowledge-and-global-climate-change-a-global-south-perspective-on-climate-solutions/>

Traditional Ecological Knowledge., Available at <https://www.bia.gov/service/fuels-management/traditional-knowledge>

Traditional Ecological Knowledge., Available at https://www.edu.gov.mb.ca/k12/docs/support/sila_video/tek.pdf

Traditional Ecological Knowledge: The Cornerstone of Indigenous Climate Adaptation in Canada., Available at <https://indigenousclimatehub.ca/tag/traditional-ecological-knowledge-tek/page/2/#:~:text=Understanding%20Traditional%20Ecological%20Knowledge,challenges%20posed%20by%20climate%20change>

United Nations Economic and Social Commission for Asia and the Pacific., 'Introduction to Environmental Education', Available at <https://www.unescap.org/sites/default/files/CH15.pdf>

United Nations Environment Programme., 'Indigenous Peoples and the nature they protect' Available at <https://www.unep.org/news-and-stories/story/indigenous-peoples-and-nature-they-protect>

United Nations Environment Programme., 'Tapping into indigenous knowledge to protect nature' Available at <https://www.unep.org/news-and-stories/story/tapping-indigenous-knowledge-protect-nature>

United Nations Environment Programme., 'UNEP strategy for Environmental Education and Training' Available at <https://www.unep.org/about-un-environment/policies-and-strategies/un-environment-strategy-environmental-education-and>

United Nations Environment Programme., 'Youth, education and environment' Available at <https://www.unep.org/topics/youth-education-and-environment>

United Nations, Report of the United Nations Conference on the Human Environment., Stockholm, 5-16 June, 1972, A/CONF. 48/14/Rev. 1

United Nations., 'Indigenous People's Traditional Knowledge Must Be Preserved, Valued Globally, Speakers Stress as Permanent Forum Opens Annual Session' Available at <https://press.un.org/en/2019/hr5431.doc.htm>

United States Environmental Protection Agency., 'What is Environmental Education?' Available at <https://www.epa.gov/education/what-environmental-education>

The Scope of Participation by Legal Representatives of Victims in Criminal Proceedings: A Review of the High Court Ruling in Republic v Sgt. Ahmed Rashid Hassan

*By: Michael Sang **

Abstract

This paper examines the High Court's ruling in Republic v Sgt. Ahmed Rashid Hassan, a significant decision that addresses the extent to which counsel for victims may participate in criminal trials. The case raised important questions about the role of victims' legal representatives, particularly whether they could cross-examine prosecution witnesses. The paper critically analyzes the court's findings, which reinforced the guidelines set by the Supreme Court in the Joseph Lendrix Waswa case, establishing clear limits on victim participation to protect the accused's right to a fair trial. By incorporating comparative law from international jurisdictions such as the International Criminal Court (ICC), the paper underscores the importance of judicial regulation in balancing victims' rights with the constitutional guarantees of the accused. The analysis highlights how the ruling shapes the future of victim participation in Kenya's criminal justice system.

Keywords: *victim participation, fair trial, cross-examination, comparative law, criminal justice, Kenya, legal representation, Republic v Sgt. Ahmed Rashid Hassan*

1. Introduction

The participation of victims in criminal trials has become a crucial and evolving aspect of modern criminal justice systems, particularly in the wake of legislative

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reforms aimed at recognizing victims' rights¹. In Kenya, the constitutional and statutory landscape has shifted significantly post-2010, with the introduction of the Victim Protection Act (VPA), which sought to enhance the role of victims in the pursuit of justice². However, this evolution has presented complex challenges, particularly regarding the extent to which victims' legal representatives may participate in criminal proceedings.³ The tension between empowering victims and safeguarding the accused's right to a fair trial has necessitated judicial scrutiny.

The ruling in *Republic v Sgt. Ahmed Rashid Hassan*⁴ is a landmark decision that addresses the fundamental question of the extent to which counsel for the victim may participate in a criminal trial. Specifically, the court was called upon to determine whether victims' legal representatives could cross-examine prosecution witnesses, a role traditionally reserved for the defense. The ruling builds on the Supreme Court's guidelines in the *Joseph Lendrix Waswa* case⁵, which established clear limitations on victims' participation, ensuring that their involvement does not infringe on the rights of the accused or the prosecution's authority.

This paper examines the litigation history, findings, and implications of the High Court's ruling in *Republic v Sgt. Ahmed Rashid Hassan*. It critically analyzes the judicial balancing act between the rights of victims and the constitutional guarantees afforded to the accused. The ruling underscores the judiciary's role in

¹ Osiro, M. A. (2022). Victim-Centred or System-Serving? The Legal Framework for Victim Participation in Sentencing in Kenya. In *Comparative criminology across western and African perspectives* (pp. 108-136). IGI Global.

² Victim Protection Act, 2014

³ Ng'arng'ar JK, *Challenges in Implementing the Victim Protection Act, 2014* (LLM research project, University of Nairobi 2020) <https://erepository.uonbi.ac.ke/bitstream/handle/11295/154494/LLM%20Research%20Project-%20J%20K%20Ngarngar%2018-%20November-2020%20Final%20Copy.pdf?sequence=1> accessed 11 January 2026.

⁴ *Republic v Hassan* (Criminal Case E070 of 2023) [2024] KEHC 11684 (KLR) (3 October 2024)

⁵ *Joseph Lendrix Waswa v Republic* [2020] eKLR

laying down practical guidelines for victim participation, particularly through comparative analysis of international practices, while maintaining the primacy of a fair trial. Ultimately, this paper argues that while victim participation is necessary for a holistic approach to justice, it must be carefully regulated to avoid compromising the accused's right to due process.

2. The Evolving Legal Status of the Participation of Victims in Criminal Proceedings

The legal status of victims' participation in criminal trials has been evolving over time, with different jurisdictions adopting various approaches to balance victims' rights with the rights of the accused.⁶ Traditionally, victims were viewed as peripheral to the criminal process, primarily serving as witnesses without a formal role in the trial.⁷ However, with increasing recognition of victims' rights, many legal systems have gradually expanded their role, including granting legal representatives for victims a more participatory status in proceedings. This evolution reflects a growing acknowledgment of the need to ensure that victims' interests are adequately protected during criminal trials⁸.

2.1 Unregulated Participation of Victims in Criminal Proceedings

Historically, victims' participation in criminal proceedings was largely unregulated, leaving their involvement at the discretion of individual judges or specific case circumstances. In systems where no formal guidelines existed, victims were often restricted to providing testimony as witnesses, with no defined role for their legal counsel. This unregulated approach created inconsistency, as there was no uniform standard governing the extent to which victims could participate or be represented.⁹

The lack of a structured framework meant that victims' legal representatives had

⁶ Osiro, M. A. (2022). Victim-Centred or System-Serving? The Legal Framework for Victim Participation in Sentencing in Kenya. In *Comparative criminology across western and African perspectives* (pp. 108-136). IGI Global.

⁷ *ibid*

⁸ *ibid*

⁹ *ibid*

little to no opportunity to address the court directly, submit evidence, or cross-examine witnesses. This absence of regulation also led to concerns about fairness in the trial process, as allowing unrestricted victim participation could potentially interfere with the accused's right to a fair trial. Consequently, while victims had an interest in the outcome of the trial, their unregulated participation risked creating imbalance and confusion in the criminal justice system.¹⁰

2.2 Overreach by Counsel of Victims into the Role of the Prosecution

One key concern that has arisen with the increasing involvement of victims' legal representatives is the potential overreach into the role traditionally reserved for the prosecution. In some cases, victims' counsel may attempt to directly influence the direction of the prosecution or even take on prosecutorial functions, such as presenting evidence, cross-examining witnesses, or making legal arguments that should ordinarily be within the prosecutor's purview.¹¹

This overreach can undermine the prosecutor's role as the impartial representative of the state, whose duty is to ensure that justice is done, not simply to secure a conviction. Victims, understandably, may have a personal stake in the outcome, which can lead to a more adversarial approach that conflicts with the broader interests of justice. Such overreach risks upsetting the balance between the parties, as the rights of the accused to a fair trial could be compromised if victims' counsel are allowed to perform prosecutorial functions without clear boundaries.¹²

To prevent this, many legal systems have introduced regulations that explicitly limit the role of victims' counsel to specific areas, such as making submissions on sentencing or representing the victim's interests without duplicating or conflicting with the prosecutor's responsibilities. These boundaries are necessary to ensure that victims are given a voice without distorting the fundamental

¹⁰ *ibid*

¹¹ Jacovides, Julia L. (2023) "Rethinking Victim Participation in International Criminal Tribunals," *Notre Dame Journal of International & Comparative Law*: Vol. 13: Iss. 1, Article 5.

¹² *ibid*

structure of criminal proceedings.¹³

2.3 Establishment of Judicial Regulation in the Joseph Lendrix Waswa Case The Litigation History and Judgment of the Supreme Court in the Joseph Lendrix Waswa Case High Court

Key Issues for Determination

In the High Court, the primary issue for determination was whether the counsel representing the family of the deceased (the victim) could be allowed to actively participate in the criminal trial. The counsel sought to participate based on Article 50(7) and (9) of the Kenyan Constitution and Sections 4(2)(b), 9(1) & (2) of the Victim Protection Act, 2014 (VPA). The court needed to address the extent to which victims or their representatives could be involved in the criminal proceedings without infringing on the rights of the accused and without overstepping the boundaries traditionally reserved for the prosecution.

Findings

The High Court, presided over by Judge Ali-Aroni, considered the submissions from all parties, relevant constitutional provisions, the Victim Protection Act, and applicable case law. The judge acknowledged the evolving role of victims in criminal proceedings, noting that the traditional view of victims as passive observers had shifted significantly with the introduction of the VPA. The court recognized that while victims' counsel could not be passive observers, their participation should not be as active and parallel to that of the prosecution.¹⁴

The court stated that victims' counsel could participate in a more engaged manner but could not act as co-prosecutors. The judge outlined specific instances where the victims' counsel could actively participate, which included: Making submissions at the close of the prosecution case on whether there was a case to answer; Presenting final submissions if the accused was put on defence; Addressing points of law that might arise during the trial; Applying to the court

¹³ *ibid*

¹⁴ *Joseph Lendrix Waswa v Republic* [2020] eKLR

for consideration at any stage of the trial.¹⁵

The judge further elaborated that the VPA delineates the scope of the victim's involvement, limiting it to particular stages of the trial and ensuring that their participation does not parallel that of the prosecution throughout the trial.¹⁶

Ultimately, the court allowed the participation of the victims' counsel but within the constrained parameters mentioned, as detailed in Paragraph 5. The decision was a measured approach, balancing the rights of the accused with the statutory rights of victims, ensuring that the trial's fairness was not compromised by the victim's counsel's participation.

This decision set the stage for subsequent appeals, as it highlighted the tension between expanding victims' rights in the criminal justice process and safeguarding the accused's right to a fair trial, which would later be scrutinized by the Court of Appeal and the Supreme Court of Kenya.

Court of Appeal

Key Issues for Determination

The Court of Appeal was called upon to address several critical issues stemming from the High Court's ruling, particularly focusing on the balance between the rights of the accused and the rights of the victim, as established by the Victim Protection Act (VPA) and the Kenyan Constitution. The appellant challenged the High Court's decision on the grounds that it elevated the role of the victim's counsel to a level comparable to the Director of Public Prosecutions (DPP), potentially infringing on the constitutional mandate of the DPP. The key issues for determination by the Court of Appeal included:

- **Whether the High Court had misinterpreted the provisions of the Constitution and the VPA:**

The appellant argued that the High Court had introduced a non-existent right by allowing the victim's counsel to participate in a manner that seemed to equate

¹⁵ Ibid, par 3

¹⁶ Ibid, par 4

their role with that of the DPP, thereby misapplying the provisions of Article 50(9) of the Constitution, which deals with the protection, rights, and welfare of victims.

➤ **Whether the High Court's ruling compromised the accused's right to a fair trial:**

The appellant contended that allowing the victim's counsel to actively participate in the trial process could prejudice the accused's right to a fair trial, as protected under Article 50 of the Constitution. The concern was that this participation might lead to a scenario where the accused was effectively facing a "double prosecution."

➤ **The extent of the victim's counsel's involvement in the criminal trial:**

The Court of Appeal needed to clarify the permissible extent of the victim's counsel's participation in the trial process, ensuring it did not infringe on the exclusive prosecutorial powers of the DPP or disrupt the balance required for a fair trial.

Findings of the Court of Appeal

In its decision, the Court of Appeal upheld the High Court's ruling, with the following key findings:

➤ **Balancing the Rights of the Accused and the Victim:**

The Court of Appeal emphasized that the Constitution requires a balance between the constitutional rights of the accused to a fair trial and the statutory rights of the victim, as outlined in the VPA. As noted in Paragraph 8 of the judgment, the court found that the rights of the victim must be exercised in a manner that does not prejudice the accused's right to a fair trial. This balance is crucial in ensuring that both parties' rights are respected within the criminal justice process.¹⁷

➤ **Constitutional and Statutory Role of the DPP:**

The court clarified that the constitutional and statutory role of the DPP to conduct prosecutions remains unaffected by the involvement of the victim or their counsel. As highlighted in Paragraph 9, the court confirmed that the victim's participation, as allowed by the High Court, does not infringe on the DPP's

¹⁷ Ibid, par 8

exclusive mandate nor does it compromise the accused's right to a fair trial. The victim's involvement is confined to specific instances, such as making submissions on points of law or at the close of the prosecution's case, which are under the court's supervision and control.¹⁸

➤ **Dismissal of the Appeal:**

Ultimately, in Paragraph 10, the Court of Appeal found that the rights granted to the victim's counsel by the High Court were in conformity with both the Constitution and the VPA. The court determined that the High Court had correctly interpreted the relevant legal provisions and had established appropriate boundaries for the victim's counsel's participation. Consequently, the Court of Appeal dismissed the appeal in its entirety, affirming the High Court's decision.¹⁹

This ruling further solidified the evolving role of victims in Kenya's criminal justice system, emphasizing that while victims' rights are crucial, they must be exercised in a manner that preserves the integrity of the trial and the fundamental rights of the accused.

Supreme Court

Key Issues for Determination

The Supreme Court identified two primary issues for determination in the **Joseph Lendrix Waswa** case, as outlined in Paragraph 41 of the judgment:

1. What is the extent of a victim's participation in a criminal matter?

This was the central issue, focusing on how far a victim or their legal representative could go in actively participating in a criminal trial without infringing on the rights of the accused or interfering with the prosecution's authority.

¹⁸ Ibid, par 9

¹⁹ Ibid, par 10

2. What ought to happen when a constitutional issue arises in a criminal trial that needs to be disposed of expeditiously?

This issue considered how the courts should manage constitutional questions that arise during criminal trials, particularly when such issues could delay the proceedings and impact the fair trial rights of the accused.²⁰

Findings of the Supreme Court

The Supreme Court's findings focused on clarifying the extent of a victim's participation in criminal trials and establishing guidelines for how such participation should be managed.

The Court noted that the central issue was whether a victim could actively participate in a criminal trial without prejudicing the accused's right to a fair hearing or interfering with the prosecution's role.²¹ The Court recognized the inherent power imbalance in criminal proceedings, where the State's power against the accused necessitates protections to ensure equality of arms.²² However, the Court also acknowledged the victim's legitimate interest in the criminal justice process.²³

The Constitution, particularly under Article 50(1) and (9), provides for both the rights of the accused and the protection, rights, and welfare of victims. The Victim Protection Act (VPA) was enacted to give effect to these constitutional provisions, ensuring that victims' rights are recognized and can be exercised in the trial process.²⁴

The Court emphasized that the criminal justice system should empower victims and allow their voices to be heard, not just as witnesses but as rights holders with valid interests in the proceedings.²⁵ The Constitution and the VPA affirm that

²⁰ Ibid, par 41

²¹ Ibid, Paragraph 42

²² Ibid, Paragraph 46

²³ ibid

²⁴ Ibid, Paragraphs 47-50

²⁵ Ibid, Paragraph 64

victims have rights within the Kenyan criminal justice system, and these rights must be balanced with those of the accused to ensure fairness, timeliness, respect, dignity, and neutrality in justice procedures.²⁶

The Court concluded that the participatory rights of the victim do not violate the fair trial rights of the accused.²⁷ The court held that the trial court has the discretion to determine the extent and manner of a victim's participation, ensuring it does not cause undue delay or prejudice the rights of the accused.²⁸ The Court affirmed that while victims could participate in trials, they do not assume the role of a secondary prosecutor. Their participation is meant to assist the trial judge in understanding the full context of the case, but the court's judgment will be based on law, facts, and a balanced consideration of all interests involved.²⁹

The court averred as follows:

*"Additionally, a victim cannot and does not wear the hat of a secondary prosecutor. When victims present their views and concerns in accord with section 9(2) (a) of the VPA, victims are assisting the trial Judge to obtain a clear picture of what happened (to them) and how they suffered, which the Judge may decide to take into account. Victim participation should meaningfully contribute to the justice process. It must be noted, however, that this does not mean that the Court's judgment will follow the wishes of the victim. The trial Judge will, of course, take into account the law, facts, all the different interests, and concerns, including the rights of the defence and the interests of a fair trial to arrive at a sagacious decision."*³⁰

Recognizing the novelty of this area of law, the Supreme Court provided a detailed set of guiding principles for trial courts when considering victim participation in criminal trials:

²⁶ Ibid, Paragraphs 66-68

²⁷ Ibid, Paragraph 71

²⁸ Ibid, Paragraph 72

²⁹ Ibid, Paragraphs 76-77

³⁰ Ibid, par 77

“Conscious that this is a novel area of law for our criminal justice system and recognizing our mandate, under Section 3 of the Supreme Court Act as the Court of final Judicial Authority, we are of the view that the following guiding principles will assist the trial Court when it is considering an application by a victim or his legal representative to participate in a trial and the manner and extent of the participation: a. The applicant must be a direct victim or such victim’s legal representative in the case being tried by the Court; b. The Court should examine each case according to its special nature to determine if participation is appropriate, at the stage participation is applied for; c. The trial Judge must be satisfied that granting the victim participatory rights shall not occasion an undue delay in the proceedings; d. The victim’s presentation should be strictly limited to “the views and concerns” of the victim in the matter granted participation; e. Victim participation must not be prejudicial to or inconsistent with the rights of the accused; f. The trial Judge may allow the victim or his legal representative to pose questions to a witness or expert who is giving evidence before the Court that have not been posed by the prosecutor; g. The Judge has control over the right to ask questions and should ensure that neither the victim nor the accused are not subjected to unsuitable treatment or questions that are irrelevant to the trial; h. The trial Court should ensure that the victim or the victim’s legal representative understands that prosecutorial duties remain solely with the DPP; i. While the victim’s views and concerns may be persuasive; and no doubt in the public interest that they are acknowledged, these views and concerns are not to be equated with the public interest; j. The Court may hold proceedings in camera where necessary to protect the privacy of the victim; k. While the Court has a duty to consider the victim’s views and concerns, the Court has no obligation to follow the victim’s preference of punishment.”³¹

These principles aim to balance the need for victim participation in criminal trials with the necessity of preserving the rights of the accused and ensuring the fair administration of justice. The Supreme Court’s judgment thus clarifies the scope of victim participation, ensuring it is exercised in a manner that contributes to, rather than detracts from, the fairness and integrity of the criminal justice process.

³¹ Ibid, par 78

3. Litigation History and Ruling of the High Court in *Republic v Sgt. Ahmed Rashid Hassan*

3.1 Background of the Case

On 12th June 2024, during the criminal proceedings in *Republic v Sgt. Ahmed Rashid Hassan*³², a legal dispute arose over the extent of participation by the victims' legal counsel. Mr. Ongoya, representing the victims, attempted to cross-examine one of the prosecution's witnesses, Lucas Ongaya (PW3). This action was met with immediate objections from Mr. Nyaberi and Dunstan Omari, representing the accused, who argued that only the defense has the right to cross-examine prosecution witnesses, while the victims' counsel could only re-examine.

Ms. Gichohi, representing the Director of Public Prosecution (DPP), supported the defense's argument, asserting that the Supreme Court had already established limits on the role of victims' counsel in criminal proceedings, restricting their participation in line with the Victim Protection Act and relevant jurisprudence.³³

In response, Mr. Ongoya contended that the law, specifically the Evidence Act, only recognizes two modes of examination: examination-in-chief and cross-examination. Since the prosecution had already conducted its examination-in-chief, he argued that his role as the victims' counsel was to cross-examine the witness. Due to the differing legal positions, the court adjourned the proceedings and directed all parties to file written submissions on the matter for further ruling.³⁴

3.2 The High Court

3.2.1 Key Issues for Determination

In the High Court, the primary issue to be determined was whether counsel for the victims could be permitted to cross-examine prosecution witnesses during

³² *Republic v Hassan* (Criminal Case E070 of 2023) [2024] KEHC 11684 (KLR) (3 October 2024)

³³ *Ibid*, par 1

³⁴ *Ibid*, par 2

the criminal trial.³⁵ The court was tasked with interpreting whether Kenyan law provided for such a role, particularly in light of international comparisons where some jurisdictions allow victims' counsel to act almost as auxiliary prosecutors with extensive rights to cross-examine witnesses and influence the trial.

The court framed the issue more broadly, questioning whether Kenyan law recognizes a role for victims' representatives akin to auxiliary prosecutors, as in Brazil and Argentina, or if it adopts a more limited role, like that of an intervener. In this capacity, the victims' legal counsel would present the victims' views and concerns at appropriate stages of the trial, without encroaching on the rights of the accused or undermining the fairness of the trial.³⁶

This distinction is crucial, as it reflects two different approaches to victim participation in criminal trials: one where victims' counsel has extensive rights to influence the proceedings, and another where participation is more restrained, focused on presenting views without affecting the prosecution's duties or the fairness of the process.

4. Findings of the High Court - Implications of the Ruling of the High Court for Participation by Representatives of Victims in Criminal Proceedings

4.1 Regulation of the Extent of Participation by the Legal Representatives of Victims

The main implication of the High Court's ruling in *Republic v Sgt. Ahmed Rashid Hassan* was the reaffirmation of the guidelines for victims' participation in criminal trials, as laid down by the Supreme Court in the *Joseph Lendrix Waswa* case. The High Court, in *Republic v Sgt. Ahmed Rashid Hassan*, restated these principles and emphasized that victims' participation is limited and subject to specific conditions.

At **paragraph 21**, the court referenced **paragraph 77** of the *Lendrix Waswa* case, which provided detailed guidelines on the participation of victims in criminal proceedings. These guidelines underscore several key limitations to ensure that

³⁵ Ibid, paragraph 11

³⁶ Ibid, paragraph 12

victims' participation does not undermine the fairness of the trial or interfere with the role of the Director of Public Prosecutions (DPP).

The guidelines include:

- ❖ Victims' counsel must be the legal representative of a direct victim in the case.
- ❖ Participation should be determined based on the unique nature of each case and at the discretion of the trial judge.
- ❖ The trial judge must ensure that victim participation does not cause undue delay in proceedings.
- ❖ Victims' participation is limited to expressing their views and concerns, without overstepping into prosecutorial functions.
- ❖ Participation should not prejudice the rights of the accused.
- ❖ Victims' counsel may only pose questions not covered by the prosecutor, subject to the trial judge's control.³⁷

The court also highlighted in **paragraph 22** that the Supreme Court did not grant an absolute right for victims' counsel to participate in all aspects of a criminal trial. Instead, the extent of participation is tightly regulated. The trial judge retains full discretion to manage the scope of the victims' involvement, ensuring it does not prejudice the accused or duplicate the prosecutorial role, which remains solely with the DPP.

This ruling reinforces the delicate balance between recognizing the victims' interests in criminal proceedings while maintaining the accused's right to a fair trial. Victims' participation is thus limited, and their counsel must navigate the proceedings without overstepping the boundaries set by law and the court's discretion.

4.2 Trial Court to Determine Appropriateness of Victims' Participation

The High Court, at **paragraph 18**, reinforced the evolving nature of criminal

³⁷ *Lendrix Waswa*, par 77

proceedings under Kenya's post-2010 constitutional framework, recognizing the victim as an integral component of the trial process. The court noted that criminal proceedings have shifted from a binary system, involving only the prosecution and the accused, to a tripartite structure, where the victim plays a crucial role, akin to the three stones supporting a traditional African cooking pot.³⁸

Despite this recognition of victims' participation, the court, while referring to the *Joseph Lendrix Waswa* case, emphasized that the extent of such involvement must be determined by the trial court. The Victim Protection Act (VPA) and the Supreme Court guidelines stress that victims' participation must be appropriate to the context and stage of the proceedings. This ensures that while victims have a voice, their involvement does not disrupt the balance required for a fair trial. The court held that victims' participation should be carefully regulated, allowing the trial court discretion to control when and how victims or their representatives may intervene. The appropriateness of their involvement is critical to preserving the rights of the accused and maintaining the integrity of the judicial process. This balancing act ensures that victims are neither marginalized nor allowed to overstep their role, thereby protecting the fairness of the criminal trial.

4.3 Role of Legal Representative of Victims as an Interlocutor

In **paragraph 19** of the *Republic v Sgt. Ahmed Rashid Hassan* case, the High Court clarified the role of the victims' legal representatives, drawing heavily from the Supreme Court's judgment in *Joseph Lendrix Waswa*. The court unequivocally stated that Kenyan law does not recognize the concept of an auxiliary prosecutor, unlike legal systems in countries such as Brazil and Argentina. Instead, the legal representative of the victim is seen only as an intervenor, not as a secondary prosecutor.

The court cited **paragraphs 75 and 76** of the *Lendrix Waswa* case, where the Supreme Court made it clear that the victim does not have an active role in decisions relating to prosecution or in determining charges. This responsibility remains solely with the Director of Public Prosecutions (DPP). The victim's

³⁸ *Ahmed Rashid Hassan* par 18

involvement is limited to assisting the trial judge by presenting their views and concerns as per section 9(2)(a) of the Victim Protection Act (VPA). This input is intended to help the judge gain a fuller understanding of the victim's perspective, but it does not allow the victim's legal representative to take on prosecutorial duties or to influence the charges or prosecution strategy.

The court also reiterated this position in **paragraph 20**, where it emphasized that Kenyan law does not provide for a secondary prosecutor. While the role of victims' counsel has expanded with the new legal framework, it remains the trial court's authority to regulate and determine the extent of their participation, ensuring it remains within the boundaries set by law. The victim's counsel cannot assume the role of a prosecutor, and the DPP retains full control over the prosecution of the case.³⁹

This ruling reinforces the distinction between the roles of the victim's legal representative as an interlocutor, whose participation is aimed at assisting the court, versus that of the DPP, who alone holds prosecutorial authority.

4.4 Restriction of Victims' Legal Representatives from Cross-Examination of Prosecution Witnesses

The High Court, in *Republic v Sgt. Ahmed Rashid Hassan*, addressed the significant issue of whether victims' legal representatives could be permitted to cross-examine prosecution witnesses. In **paragraph 24**, the court noted two primary grounds for opposing this cross-examination. First, under **Article 157** of the Constitution, the role of conducting prosecutions is solely vested in the Director of Public Prosecutions (DPP)⁴⁰. Second, allowing cross-examination by victims' counsel could prejudice the accused's right to a fair trial. The court also acknowledged that while the counsel for the victims had cited persuasive High Court authorities where cross-examination was allowed, none of those cases came from higher courts such as the Court of Appeal or the Supreme Court, limiting their binding authority.

³⁹Ibid, paragraph 20

⁴⁰ Constitution of Kenya, 2010, art 157

At **paragraph 27**, the court expressed its concern over the potential challenges in regulating the cross-examination. It noted that once cross-examination begins, the court cannot "unhear" or disregard the questions posed, and the counsel would have broad latitude in framing those questions. This could make it difficult for the court to control the process and prevent possible prejudice to the accused.

The court also referenced prior decisions supporting the idea that victims' participation, including cross-examination, should be structured and regulated from the pre-trial stage. In **paragraph 30**, the court highlighted that allowing cross-examination at the hearing stage, without pre-trial regulation, would undermine the purpose of practices like pre-trial conferences and active case management, which are essential to ensuring fairness in criminal trials. The ruling stressed that such participation must be laid out clearly during pre-trial, and ambushes during trial should be avoided.

In **paragraph 31**, the court concluded that victims' counsel could only apply to question a witness at the trial stage under specific circumstances, such as when unforeseen situations arise during the trial or new evidence emerges that prejudices the victims. This exception ensures that victims' participation remains limited to protecting their interests without compromising the accused's right to a fair trial.⁴¹

4.5 Safeguards for the Rights of the Accused

In **paragraph 42** of the *Republic v Sgt. Ahmed Rashid Hassan* case, the High Court reaffirmed the necessity of protecting the accused's right to a fair trial, particularly in the context of allowing victims' counsel to cross-examine prosecution witnesses. The court, referencing **paragraphs 80 and 92** of the *Joseph Lendrix Waswa* case, emphasized the importance of avoiding unreasonable delays in criminal proceedings, which could prejudice both the accused and the victims. The court highlighted the constitutional guarantee under **Article 50(2)(e)** that ensures an accused person's right to a trial that commences and concludes

⁴¹ *Ahmed Rashid Hassan* par 31

without unreasonable delay. Similarly, **Section 9(1)(b)** of the Victim Protection Act (VPA) grants victims the right to an expeditious trial, while **Article 159(2)(b)** of the Constitution obligates courts to avoid undue delays in the dispensation of justice. The Supreme Court in the *Nick Salat Case*⁴² emphasized that justice delayed is justice denied, underscoring the importance of timeliness in the justice system.

At **paragraph 43**, the High Court applied this principle, stating that allowing the victims' counsel to cross-examine prosecution witnesses without limitation, proper application, or pre-trial disclosure would be prejudicial to the accused. Such unrestricted participation could result in surprises during trial, creating unnecessary delays and affecting the fairness of the proceedings. The court was convinced that this approach would violate the accused's right to a fair trial, which is a long-standing legal custom that must be preserved under all circumstances.

In essence, the court reaffirmed that while victims' participation is important, it must be carefully controlled to safeguard the rights of the accused. Allowing victims' counsel to engage in unrestricted cross-examination would introduce unpredictability into the trial, potentially disrupting the balance of justice and infringing on the accused's constitutional rights.

4.6 Role of Comparative Law

In addressing the role of victims' legal representatives in cross-examination, the High Court, in *Republic v Sgt. Ahmed Rashid Hassan*, drew significantly from comparative law, particularly the practices of the International Criminal Court (ICC). In **paragraphs 32-41**, the court examined how other jurisdictions have handled the participation of victims in criminal trials, especially regarding their ability to question witnesses. This comparative analysis provided insights into regulating victim participation while safeguarding the accused's right to a fair trial.

⁴² *Nicholas Kiptoo Arap Korir Salat v Independent Electoral and Boundaries Commission & 7 others* SC. Application No. 16 of 2014; [2014] eKLR (Nick Salat Case)

At **paragraph 32**, the court acknowledged the importance of cross-pollination of ideas in legal systems, referring to Justice Kiage's statement in *Independent Electoral and Boundaries Commission & 4 Others v Ndii & 312 Others* [2021] eKLR, **para 51**, emphasizing the value of global conversations on constitutional law and practice. The court relied on foreign jurisprudence to fortify its decision, particularly where Kenyan apex courts had not rendered themselves on the matter.⁴³

The court, in **paragraphs 33-34**, discussed the ICC case of *Prosecutor vs Bosco Ntaganda* ICC-01/04-02/06, where the court held that legal representatives of victims could question witnesses but only after following strict procedures, such as submitting a motivated request before the examination-in-chief and adhering to specific limitations on the scope of questioning. This regulated approach aimed to prevent prejudice to the accused.⁴⁴

Similarly, the court referred to *Prosecutor v Jean-Pierre Bemba Gombo* ICC-01/05-01/08 at **para 35**, where it was emphasized that victims' participation, including the presentation of evidence, is not an unfettered right. Their involvement must be regulated by the trial chamber, taking into account the rights of the accused and the fairness of the trial.⁴⁵ This was echoed in *Prosecutor vs Germain Katanga and Mathieu Ngudjolo Chui*, **para 36**, where the court permitted victims' legal representatives to question witnesses, but only when it aided the chamber in determining the truth and did not infringe on the accused's rights.⁴⁶

At **para 39**, the ICC's ruling in *Prosecutor v Ali Muhammad Ali Abd-Al-Rahman* reaffirmed the necessity of balancing the accused's rights to adequate defense preparation and an expeditious trial with the victims' interest in achieving justice. The court noted that this balancing test is vital in ensuring both fairness and

⁴³ *Independent Electoral and Boundaries Commission & 4 Others v Ndii & 312 Others* [2021] eKLR, para 51

⁴⁴ *Prosecutor vs Bosco Ntaganda* ICC-01/04-02/06

⁴⁵ *Prosecutor v Jean-Pierre Bemba Gombo* ICC-01/05-01/08

⁴⁶ *Prosecutor v. Germain Katanga and Mathieu Ngudjolo Chui*, Case No. ICC-01/04-01/07, International Criminal Court (ICC), Trial Chamber II, Judgment of 7 March 2014, para 36

efficiency in trials.⁴⁷

In **paragraphs 40-41**, the High Court stressed that the right to a fair trial is paramount in criminal proceedings in Kenya, placing this constitutional guarantee on a high pedestal. Drawing from the ICC's approach, the court reaffirmed that any participation by victims' legal representatives must be closely regulated to avoid prejudicing the accused, ensuring that the trial remains judicious, fair, and transparent.⁴⁸

Lastly, the court referred to **paragraph 44** and cited the High Court of India's ruling in *Sathyawani Ponrani*, which held that while the public prosecutor has sole discretion in choosing and examining witnesses, the court may allow a victim's lawyer to step in if the prosecutor fails to address certain issues, provided it is necessary to ensure a fair trial.⁴⁹

4.7 Guidelines and Final Determination by the Court

In **paragraph 45**, the High Court laid down a clear set of guidelines to regulate the participation of victims' legal representatives in the examination of witnesses. These guidelines were established to balance the victims' right to participate with the need to protect the accused's right to a fair trial and avoid surprises or delays during the trial. The court outlined the following procedures:

- ❖ **Application Requirement:** Victims' counsel must make an application either before or during the pre-trial conference, expressing their intention to examine witnesses.
- ❖ **Disclosure of Specific Areas:** The application must disclose the specific areas of inquiry that counsel intends to pursue with the witnesses.
- ❖ **Relevance of Questions:** The application should explain the relevance of the intended questions.

⁴⁷ *Prosecutor v. Ali Muhammad Ali Abd-Al-Rahman (Ali Kushayb)*, Case No. ICC-02/05-01/20, International Criminal Court (ICC), Trial Chamber I, Decision of 15 December 2022.

⁴⁸ *Ahmed Rashid Hassan* paragraphs 40-41

⁴⁹ *Sathyawani Ponrani vs Samuel RAJ* CRL O.P (MD) No. 5474 of 2010

- ❖ **Sharing of Questions:** If the court permits the application, the questions must be shared with the other parties before the examination of the witnesses.
- ❖ **Objections:** Any objections by the other parties must be raised before the witness testifies.
- ❖ **Limitation of Examination:** The examination by victims' counsel should be confined to the identified areas approved by the court.⁵⁰

These guidelines were designed to prevent potential prejudice to the accused and ensure that the trial proceeds fairly and transparently.

In **paragraph 46**, the court clarified that these guidelines were introduced in response to the objections raised by both the defense and the prosecution counsel. As such, the court determined that it would not be just to apply the guidelines retroactively to the ongoing proceedings.

Finally, in **paragraph 47**, the court granted the victims' counsel's application to cross-examine prosecution witnesses under specific conditions:

- ✓ Counsel must file the set of questions they wish to ask the witness (PW3).
- ✓ Counsel must also submit questions they anticipate posing to the remaining witnesses, based on previously supplied evidence and witness statements.
- ✓ Unanticipated questions must be limited to new evidence or questions not previously posed by the prosecution.
- ✓ Counsel must demonstrate the relevance of each question to the victims' interests.

These conditions reflect the court's effort to regulate victim participation carefully, ensuring that it supports justice without compromising the accused's rights or the trial's fairness.

⁵⁰ Ahmed Rashid Hassan paragraph 45

Conclusion

The ruling in *Republic v Sgt. Ahmed Rashid Hassan* marks a pivotal moment in the development of Kenya's criminal justice system, particularly in balancing the rights of victims with those of the accused. As criminal proceedings evolve to recognize the legitimate interests of victims, courts must ensure that such participation does not infringe upon the constitutional guarantees of a fair trial. The High Court's decision, guided by the Supreme Court's judgment in the *Joseph Lendrix Waswa* case, affirms that while victims play an important role in criminal proceedings, their legal representatives are not auxiliary prosecutors.

The court's ruling lays down clear guidelines for the participation of victims, emphasizing the necessity of pre-trial applications and the strict regulation of cross-examination rights to prevent prejudice against the accused. By referencing comparative law, particularly the practices of the International Criminal Court, the High Court has established a structured approach that balances the rights of all parties in the pursuit of justice.

Ultimately, this case underscores the importance of judicial oversight in ensuring that victims' rights are upheld without undermining the foundational principles of criminal justice, including the accused's right to a fair and expeditious trial. As the Kenyan legal system continues to evolve, this ruling serves as a crucial reference point for future cases involving the participation of victims in criminal trials. The decision reflects a careful balancing of interests, reaffirming the principle that justice must not only be done but must be seen to be done, for both the victims and the accused.

References

Constitution of Kenya, 2010

Independent Electoral and Boundaries Commission & 4 Others v Ndii & 312 Others [2021] eKLR

Jacovides, Julia L. (2023) "Rethinking Victim Participation in International Criminal Tribunals," *Notre Dame Journal of International & Comparative Law*: Vol. 13: Iss. 1, Article 5.

Joseph Lendrix Waswa v Republic [2020] eKLR

Nicholas Kiptoo Arap Korir Salat v Independent Electoral and Boundaries Commission & 7 others SC. Application No. 16 of 2014; [2014] eKLR

Osiro, M. A. (2022). Victim-Centred or System-Serving? The Legal Framework for Victim Participation in Sentencing in Kenya. In *Comparative criminology across western and African perspectives* (pp. 108-136). IGI Global.

Prosecutor v Jean-Pierre Bemba Gombo ICC-01/05-01/08

Prosecutor v. Ali Muhammad Ali Abd-Al-Rahman (Ali Kushayb), Case No. ICC-02/05-01/20, International Criminal Court (ICC), Trial Chamber I, Decision of 15 December 2022.

Prosecutor v. Germain Katanga and Mathieu Ngudjolo Chui, Case No. ICC-01/04-01/07, International Criminal Court (ICC), Trial Chamber II, Judgment of 7 March 2014

Prosecutor vs Bosco Ntaganda ICC-01/04-02/06

Republic v Hassan (Criminal Case E070 of 2023) [2024] KEHC 11684 (KLR) (3 October 2024)

Sathyavani Ponrani vs Samuel RAJ CRL O.P (MD) No. 5474 of 2010

Victim Protection Act, 2014

An Appraisal of the Legal & Institutional Frameworks governing Disaster Management in Kenya

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Abstract

Kenya has experienced disasters of various kinds ranging from floods, mud & landslides, droughts, fire disasters to chemical incidents. How the disasters are managed is a test to the effectiveness of the legal and institutional frameworks. The inquiry helps identify areas of weaknesses which helps point out to the possible areas for reform. The paper notes that disaster management in Kenya is structured around the executive authority, therefore the effectiveness of any form of disaster management is reliant on the goodwill of the executive constituted from the political leadership devoid of independence and accountability. This form of management lacks proper coordination which is critical. The recovery of livelihoods is near impossible which leaves the affected more vulnerable. The National Disaster Risk Management Bill 2023, is the proposed law that seeks to provide a structure that brings in together the national government including the executive and the county government with other actors which would enhance disaster management. Respecting the rule of law and having the required financial resources would largely enhance disaster management in Kenya.

1.Introduction

A disaster has been defined as a serious disruption of the functioning of a community or a society that causes widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources.¹ Disasters can include water disasters, floods, fire disasters, earthquakes, drought, chemical and industrial accidents which may be explosions and accidental discharges in plants or storage facilities handling toxic and flammable substances, accidents during transportation,

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¹ The National Policy for Disaster Management in Kenya 2017; ISDR (2002); Living with Risk, A global Review of Disaster Reduction Initiatives, Preliminary version, pp 24-25. Geneva, Switzerland.

technological failures, natural hazards such as fire, arson or sabotage incidents affecting human installations which may occur as a result of generation, exploration, use and transmission of renewable energy among others.² Disasters occur when the natural hazards interact with vulnerable people, property, and livelihoods causing varying damage depending on the level of vulnerability of the individual, group, property or livelihoods. Disasters disrupt people's lives through displacements, deaths and injuries. They destruct livelihoods and drain years of economic gains and development. Global trends indicate that both natural and man-made disasters are increasing and unfortunately, the worst affected are the vulnerable people from developing nations.³

Kenya experiences a number of natural and human induced hazards, such as floods, droughts, landslides, lightening/thunderstorms, wild fires, strong winds, diseases like HIV/AIDs, cholera and conflicts induced disasters. ⁴ Kenya heavily relies on agriculture to support the economy and peoples' livelihood hence a key factor in poverty eradication programmes. Agriculture is one of the sectors that is heavily affected by disasters such as drought, floods, which makes it imperative to manage disasters effectively.⁵

Disasters must be managed in the best way possible to control disastrous interruptions to human lives and the environment. "Disaster management" means a continuous and integrated multi-sectoral process of planning and implementation of measures geared towards disaster preparedness, response, mitigation and recovery;⁶ while disaster risk management involves systematic processes using organizational and operational skills to implement strategies, policies and improved coping capacities to lessen adverse impacts of hazards and the possibility of disasters.⁷ Disasters have a public health importance due to their potential to cause loss of lives and livelihoods. What differs however is the

² Alphonse Ndar, A Critical Analysis of Kenya's Disaster Management Strategy, 2019

³ Julius Huho et al, Profiling Disasters in Kenya and their Causes 7 (1) Academic Research International 2016.

⁴ UNDP, Kenya Natural disaster profile.

⁵ Kenya Natural disaster profile.

⁶ The Public Finance Management (Disaster Management Fund) Regulations, 2022

⁷ National Disaster Risk Management Policy, 2017

preparedness of the community which determines its ability to cope and prevent loss of lives and livelihoods during the event and immediately after. It is even more important however, that the ability to predict a disaster before it happens allows mechanisms such as evacuations which drastically reduce loss of lives.⁸ Disaster preparedness is one of the most important components of any disaster management plan because it involves mitigation strategies that can aid in leading us to post-disaster recovery.⁹

The frequency and severity of both natural and human-induced disasters, whether stemming from emerging strains of vaccine-resistant diseases, local or regional conflicts, or climate change, is rising; therefore it is imperative to mitigate, prepare for, respond to, and recover from these catastrophic occurrences.¹⁰ Some of the effects are the reduced ability to access post-disaster medical services can lead to lasting health repercussions. Disasters also disrupt education systems, further compounding their socioeconomic impact. Marginalized groups, including women, children, the elderly, individuals with disabilities, and minority communities, in particular bear a disproportionate burden of vulnerability to natural disasters.¹¹ Disasters remain a barrier to achieving sustainable development and if not contained, a country runs the risk of disrupting planned development activities as policymakers divert resources from planned activities to managing the disasters.¹²

1. The International Legal Framework supporting Disaster Management

The existing international law applicable to disasters can fall into four areas, namely International Humanitarian Law, International Human Rights Law,

⁸ Marion Mutugi & Samuel Maingi, Disasters in Kenya: A major public health concern, *International Journal of Public Health and Epidemiology* Vol. 8 (9) 2019.

⁹ Joseph Owuondo, 'Review of Disaster Preparedness and Management Techniques in Kenya' VI (VII)[2022]*International Journal of Research and Innovation in Social Science* 701.

¹⁰ Jiapeng Dai & Aisha Azhar, Collaborative governance in disaster management and sustainable development 2024 *Public Administrative Development* 358.

¹¹ *Ibid* 359.

¹² Irene Rotich, 'Disaster Management in Kenya' 24(1) [2019] *IOSR Journal of Humanities and Social Science* 41.

International Refugee Law, and International Environmental Law. Each of these legal frameworks offers different perspectives and mechanisms for addressing the complex issues arising from disasters, highlighting the need for a multifaceted approach to legal intervention in disaster prevention and response efforts.¹³ The discussion in this section will focus on the International Human Rights Law and International Environmental Law. Fundamental human rights are often threatened during disasters, therefore it is imperative for states to take proactive measures to safeguard these rights effectively. States that are parties to human rights treaties are under the obligation to protect the rights of individuals at all times, including disaster situations.¹⁴ The International Covenant on Civil and Political Rights that safeguards the right to life and other rights and the International Covenant on Economic, Social, and Cultural Rights that safeguard the right to adequate, housing and health and other related rights are informative in disaster management. It is critical to discuss the normative framework under International Environmental Law and Disaster Management Law that informs disaster management approaches.

2.1 UN Declaration on Human Right to a Clean, Healthy and Sustainable Environment

The UN Framework Principles on Human Rights and the Environment outline the basic obligations of States under human rights law regarding the enjoyment of a safe, clean, healthy, and sustainable environment.¹⁵ The declaration emboldens the protection of the human right to a clean and healthy environment by calling for full implementation of the multilateral environmental agreements under the principles of international environmental law including the precautionary and polluter pays principles which ally to matters of redress of

¹³ Yena Chong (n 14) 31.

¹⁴ Yena Chong, 'International Legal Framework for Disaster Management-Responsibilities of States and the International Community' (Masters Thesis of International Studies- Seoul national University 2024) 45.

¹⁵ John Knox, 'Framework Principles on Human Rights and the Environment (UN Human Rights Special Procedures' (UNEP Special Rapporteurs, Independent Experts and Working Groups, 2018) 13.

harm.¹⁶ The precautionary approach ensures that the states regulates all human activities to reduce risk to harm whereas the polluter pays principle requires that the states enables access to justice for remedies of harm where such disasters impact on the people and the environment at large.

The declaration reiterates the obligations of the states to respect, protect and promote human rights and to take measures to protect the human rights of all, as recognized in different international instruments, and that additional measures should be taken for those who are particularly vulnerable to environmental degradation, noting the framework principles on human rights and the environment.¹⁷

2.2 Sendai Framework for Disaster Risk Reduction (Sendai Framework) 2015–2030

Sendai Framework lays down a foundational framework for management of disasters which may be as a result of chemical, biological, radiological or nuclear threats.¹⁸ The framework calls for a coordinated framework that embraces all phases of disaster management namely: prevention, preparedness, response and recovery operations. The framework aims to achieve the substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries over the next 15 years.¹⁹

The prevention phase entails measures such as risks and vulnerabilities assessments that are aimed at mitigating the adverse impacts of a hazardous event that may occur. The preparedness phase is the stage where knowledge and capacities are developed in order to effectively anticipate, respond to and recover from the impacts of likely, imminent or current disasters. Early warning systems

¹⁶ UN Declaration on Human Right to a Clean, Healthy and Sustainable Environment A/76/L.75.

¹⁷ Ibid.

¹⁸ UNGA, 'Implementation of the Sendai Framework for Disaster Risk Reduction 2015–2030', Report of the Secretary General, UN Doc. A/75/226 (23 July 2020), para 6

¹⁹ Irene Rotich (n 12) 48.

are part of the preparedness phase.²⁰ Pre-disaster activities designed to increase the level of readiness or improve operational capabilities for responding to an emergency.²¹

The response phase refers to ‘actions taken directly before, during or immediately after a disaster to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected.’ Actions taken immediately before, during or directly after a disaster to reduce impacts and improve recovery.²² This phase is important because it impacts on the compensation process. Reducing the health impact mitigates damage which is a major component of compensation. If such damage is not controlled, then compensation would be ineffective as the polluter would not be able to pay for damage.

The recovery phase entails the process of restoring or improving of livelihoods and health, as well as economic, physical, social, cultural and environmental assets, systems and activities, of a disaster affected community or society, aligning with the principles of sustainable development to avoid or reduce future disaster risk’.²³

The state is mandated to set up the disaster management support infrastructure consisting of legislative support, governmental support, health institutions, and budgetary allocations.²⁴ This may entail setting up coordination mechanisms within and across sectors requiring the full engagement of all state institutions of an executive and legislative nature at national and local levels and with relevant stakeholders at all levels, with clear set up responsibilities across public and private stakeholders while meaningfully empowering the communities.²⁵ The support infrastructure includes setting up of financial instruments to promote

²⁰ Ibid.

²¹ ISDR 2002.

²² UNDP, Kenya National Disaster Profile.

²³ Ibid.

²⁴ UNGA (n 126) Annex 2 para 17. para 27(i).

²⁵ UNGA (n 126) Annex 2 para 19 e) f).

mechanisms for disaster risk transfer and insurance, risk sharing and retention and financial protection, for both public and private investment to reduce the financial impact of disasters on governments and societies, in urban and rural areas.²⁶

2.3 Stockholm Declaration on Human Environment

The objective of the Stockholm conference was to formulate principles that could guide states in addressing environmental problems, while ensuring that all rights are protected rights and obligations are met, stimulate public opinion and community participation for the protection and improvement of the environment in the interest of present and future generations, and to set objectives for future international cooperation.²⁷ The principles like Principle 21 that cautions states to engage in activities that are not harmful to neighbouring states. States are expected to set out legal frameworks to regulate activities that may impact on the environment which in effect reduces disaster.

2.4 Rio Declaration on Environment and Development

The Rio Declaration is made up principles that inform important preventative and remedial measures for environmental problems which be disasters by their nature. Principle 1 emphasizes the desirability of a human being for a healthy and creative life in harmony with nature, the fourth principle refers to the need for environmental protection while the eighteenth principle refers to the need to share information and experiences between countries in the context of natural disaster risks, as well as helping countries involved with emergencies and disasters.²⁸ The 'polluter pays principle' denotes that the polluter should bear the responsibility for effecting compensation measures critical in restoration which forms part of the recovery phase of disaster management.²⁹ The environmental

²⁶ UNGA (n 126) para 30.

²⁷ Dinah Shelton, Stockholm Declaration (1972) and Rio Declaration (1992) (Oxford Public International Law- Max Planck Encyclopaedia of Public International Law para 9.

²⁸ Vahid Delshad et al, "International Agreements on Disaster Risk Management Based on World Conferences, Successful or Not: A Review Study" 6 (1) 2020 *Health in Emergencies and Disasters Quarterly*.

²⁹ Rio Declaration, UN Doc. A/CONF. 151/26 (Vol. I), 12 August 1992, principle 16.

impact assessment is recognised as an enabling tool that stipulates preventative and measures to reduce risk of harm and reduce harm where accidents occur which helps to manage disasters.³⁰ The precautionary principle demands that developers takes precaution in the use of technology and that lack of scientific information showing impact of technology or development is not an excuse not to adopt such precautionary measures.³¹

2. The National Legal Framework for Disaster Management

Disaster management in Kenya is primarily guided by the National Disaster Risk Management '(NDRM) Policy of 2017 which reflects the norms in the Sendai Framework for Disaster Risk Reduction. The NDRM Policy provides a framework for effective disaster management by stipulating measures that should be taken in the disaster stages of preparedness, prevention, response and recovery. Such measures are meant to reduce natural and human-induced disaster risk and associated losses in social, economic and environmental assets at national and county levels through the establishment of an integrated multi-hazard DRM approach.³² The NDRM policy builds on the constitution which defines the rights of the citizens that should be protected at all times and prescribes the function of disaster management as a shared between the county and national government. The tenets of disaster management as espoused in the policy and the Constitution should be illuminated in the statutory framework for disaster management.

3.1 The Constitution of Kenya

The Constitution is the supreme law of the land and requires every person applying or interpreting it, enacting or interpreting any law and making or implementing any public policy decision to uphold the values espoused under it including human dignity, equity, social justice, equality, human rights, non-discrimination and protection of the marginalized.³³ Therefore, all public policy

³⁰ Rio Declaration, principle 17.

³¹ Rio Declaration principle 15.

³² Kenya Institute Public Policy Research and Analysis, National Disaster Risk Management Policy 2017 <https://repository.kippira.or.ke/items/b8552484-8af1-4b36-a43d-f236fcc0ba2b> accessed October 27, 2025.

³³ Article 10(2)(b)

decisions including decisions to coordinate and manage disasters must be subjected to these constitutional imperatives. The State and developers are expected, inter alia, to uphold human dignity, people participation, social justice and human rights when managing disasters.

a) Protection of fundamental Rights and freedoms

The constitution has an elaborate bill of rights that protects the rights of every person resident within the jurisdiction. Article 26 guarantees the right to life, whilst Article 28 recognizes the inherent dignity of every person and the right to have that dignity respected. Other rights protected by the Constitution are the right to property.³⁴ These rights must be protected at all times especially at the time of disasters where if prompt action is not taken people can lose lives as well as their property.

The protection of socio-economic rights in article 43 envisages proper disaster management measures. Article 43 guarantees every person the right to the highest attainable standard of health,³⁵ accessible and adequate housing, and reasonable standards of sanitation,³⁶ to be free from hunger, and to have adequate food of acceptable quality³⁷ and to clean and safe water in adequate quantities³⁸ and that to access emergency medical treatment.³⁹ The provisions imply that emergency medical care is a right for every person and that facilities and institutions, both private and public are required by law to provide medical services in cases that are deemed to be of emergency. The right to social security is recognised which includes disaster relief during emergencies and the right to be free from hunger and to have adequate food. The state is expected to give immediate support and intervention by the state during disasters.

The constitution entrenches an elaborate framework for the enforcement of

³⁴ Article 40

³⁵ Article 43(1)(a)

³⁶ Article 43(1)(b)

³⁷ Article 43(1)(c)

³⁸ Article 43(1)(d)

³⁹ Article 43(2)

environmental rights and places a duty on the state to safeguard those rights. Article 42 guarantees to every person the right to a clean and healthy environment while Article 69 obligates the state to ensure sustainable exploitation, utilization, management and conservation of environment and natural resources and ensure equitable sharing of the accruing benefits. The state and project proponents are required to establish effective systems of conducting environmental impact assessment, environmental social impact assessments, environmental auditing, monitoring and elimination of processes and activities that are likely to endanger the environment.⁴⁰ Article 70 expands the *locus standi* to allow any person to challenge violation of the right to clean and health environment by petitioning the Environment and Land Court⁴¹ for appropriate reliefs including an order to conservatory orders, restorative orders, damages which goes a long way in managing and reducing disaster risks. Similarly, article 22 allows any aggrieved person to enforce any right recognized in the constitution. The provisions envisage prevention, preparedness, response and recovery phases of disaster management. The state is under obligation to safeguard these rights under the principle of equality before law and full enjoyment.⁴² The state is thus obligated to take policy and legislative measures to protect and guarantee life, dignity and protection of property in development and disaster management.

b) The Role of Devolution in Disaster Management

The Constitution contains a devolved framework in disaster management there being a devolved system of government⁴³ whose functions are described in the Fourth Schedule of the Constitution. However, in the implementation, the two levels of government must work together.⁴⁴ Any function not explicitly assigned to county or national government will automatically be reserved for national

⁴⁰ Article 69.

⁴¹ The Environment and Land Court (ELC)

⁴² Article 27

⁴³ Part Eleven

⁴⁴ Article 189(2)

government.⁴⁵ Disaster management is a concurrent function⁴⁶ meaning that the function is assigned to national and county governments. The national government has policies that give general direction regarding disaster management but there is no comprehensive legislation. Many county governments have legal frameworks for disaster management such as West Pokot,⁴⁷ Kakamega,⁴⁸ Busia,⁴⁹ Makueni,⁵⁰ Laikipia,⁵¹ Tana River,⁵² Mombasa,⁵³ Turkana,⁵⁴ Kajiado,⁵⁵ Samburu,⁵⁶ Bungoma,⁵⁷ Marsabit,⁵⁸ Kisumu,⁵⁹ and Nyeri⁶⁰ among other counties. Many functions are concurrent but are delineated to the extent that each level of government play its role.

In the prevention phase of disaster management, the national government bears the responsibility of development of the National Disaster Prevention Policy; implementation of National Disaster Policy; capacity building and technical assistance to county governments; conducting national disaster risk assessments; establishing national disaster early warning sector based systems and communicate early warning disaster information to counties among other functions. In this phase the counties are mandated among other things to align the county disaster prevention policy with national policy; implement county disaster prevention policy; capacity building and technical assistance to

⁴⁵ This gives the national government superintendence role. Generally, the national government cannot afford to ignore disaster management on account of devolution. In any event, it is a concurrent function.

⁴⁶ Section 24 Part I and section 12 of Part II Fourth Schedule.

⁴⁷ West Pokot County Disaster Risk Management Act, 2022

⁴⁸ Kakamega County Disaster Management Act no 3 of 2015.

⁴⁹ Busia County Disaster Management Act no 9 of 2015.

⁵⁰ Makueni Disaster Management and Special Programmes Policy 2022.

⁵¹ Laikipia County Disaster Risk Management Act, 2009.

⁵² Tana River Disaster Risk Management Act

⁵³ Mombasa County Disaster Preparedness & Emergency Management Act, 2011

⁵⁴ Turkana County Emergency & Disaster Management Act, 2016.

⁵⁵ Kajiado County Disaster Management Act no 6 of 2016.

⁵⁶ Samburu County Disaster Management Act 2015.

⁵⁷ Bungoma County Disaster Management Emergency Fund Regulations 2020.

⁵⁸ Marsabit County Disaster Risk Management Act.

⁵⁹ Kisumu County Disaster & Emergency Act No 10 of 2015.

⁶⁰ Nyeri County Disaster Management Act of 2021.

communities on disaster prevention; conduct county disaster risk assessments; establish national disaster early warning sector based systems to county level and communicate early warning disaster information to communities.⁶¹

In the preparedness phase, the national government is mandated to develop and implement policies, norms and standards for disaster preparedness; mobilise resources disaster risk preparedness, resilience, for buildings and climate change adaptation strategies; build capacity and provide technical assistance to county governments; develop and implement national resilience and climate change adaptation strategies.⁶² The county is expected to domesticate and implement national policies norms and standards in disaster preparedness; mobilise resource for disaster risk preparedness resilience building and climate change adaptation strategies in the county build capacity and provide technical assistance to the local communities in disaster preparedness; domesticate national resilience and climate change adaptation strategies to the county and implement county specific strategies for resilience and climate change adaptation.⁶³

In the response phase, the national government is mandated to provide capacity building and technical assistance to counties on disaster response; conduct rapid assessments to understand national vulnerability levels; declare national emergency where necessary; activate plans for national emergency responses; implement information sharing mechanism between the national and county governments and strategic coordination of disaster response among other functions.⁶⁴ The counties are mandated to provide capacity building and technical assistance to communities on disaster response; conduct rapid assessments to understand county vulnerability levels; declare county emergency where necessary; activate plans for county emergency plans;

⁶¹ Intergovernmental Relations Act; The Delineation of Disaster Management Function (Legal Notice 86 of 2021).

⁶² Intergovernmental Relations Act; The Delineation of Disaster Management Function (Legal Notice 86 of 2021).

⁶³ Ibid.

⁶⁴ Ibid.

implement information sharing mechanism between the national and county governments; coordinate disaster response through multi sectoral approach and cross-county and report on response initiatives during emergencies in the counties.⁶⁵

In the recovery phase, the national and county governments respectively are mandated to develop and implement national and county recovery plans and programs; provide capacity building and technical assistance to counties and communities on disaster recovery; consolidate post disaster needs assessments from counties and in the counties and consolidate county monitoring, evaluation and lessons learnt report; conducting national and county public participation in recovery programs and mobilise resources mobilization nationally and in the counties for county governmental for disaster risk recovery among other functions.⁶⁶

c) Declaration of the State of Emergency

The constitution recognizes the power of the State to declare a state of emergency or a national disaster. A state of emergency may be declared in the context where the state is threatened by, inter alia; natural disasters or any other public emergency.⁶⁷ Whenever a state of emergency or national disaster is declared, sufficient resources would be mobilized to combat the calamity.

Therefore, the constitution entrenches salient provisions which may be invoked to manage and ameliorate the effects of the disasters as well as prevent disasters from occurring. The Constitution embeds preventive; precautionary and compensatory principles, to prevent, avert disaster risks from occurring and enable recovery and restoration where disasters impact the people, property and or the environment.

⁶⁵ Intergovernmental Relations Act; The Delineation of Disaster Management Function (Legal Notice 86 of 2021) 5

⁶⁶ Ibid.

⁶⁷ CoK, Art 58.

3.2 Statutory Legal Framework for Disaster Management

Statutes lay down frameworks that cover every phase of disaster management. Statutes have sections for enforcement of the law which contribute towards prevention of disasters through control of activities or behavior that may lead to disasters.

a) County Government Act (CGA)

CGA provides a legal and institutional framework for the management of county governments in Kenya. The Act enables a framework for disaster management as directed by the Constitution.⁶⁸ County governments are constitutionally mandated to manage disaster risk within their respective county boundaries by coordinating disaster response and risk reduction efforts, tailored to the severity and level of the emergency, crisis, or disaster.⁶⁹

The county governments are mandated to deliver services according to the needs of the county including disaster management which they need to do with efficiency.⁷⁰ The ward administration where necessary may be involved in disaster management.⁷¹ The structure at the national level for disaster management is mirrored at the county level through County Disaster Risk Management Committees (CDRMCs), guided by the National Disaster Risk Management Policy. Volunteerism and County Emergency Operation Centers (EOCs) play a crucial role in coordinating and linking with the National Government, ensuring synchronized efforts across the country.⁷²

Counties such as West Pokot, Kakamega, Busia, Makueni, Mombasa, Kisumu and others have enacted legislation for disaster management which provides a detailed framework.⁷³

⁶⁸ CGA, s 5.

⁶⁹ National DRM Strategy (2025-2030)8.

⁷⁰ CGA, s102-104.

⁷¹ CGA, s86.

⁷² National Disaster Risk Management Strategy (2025-2030) 27.

⁷³ See (n 46-59).

b) Physical and Land Use Planning Act (PLUPA)

Land use Planning (LUP) was introduced by the colonial governments during the colonial period to bring order and land use efficiency in Africa urban areas through processes like zoning. Rapid urbanization necessitates land use planning to reduce risk in urban areas. The factors that lead to risk in urban areas are the location and exposure to hazards, increased vulnerability due to poor local governance, environmental degradation and the overstretching of resources, therefore inappropriate land use planning in urban areas increase vulnerability to disasters.⁷⁴

Zoning provisions ensure industrial facilities are located away from ecologically sensitive areas like rivers, wetlands, or densely populated regions. The planning process aims to reduce, during all phases of intervention, the risks associated with populations exposed to disaster. The act of planning concerns the identification of risk areas and normative rules, which controls land use or alter property or tenure rights. The goal is to establish and enforce prohibitions over disaster-prone areas and legal restrictions or alternatives over exercise of land rights.⁷⁵ The principles of physical and land use planning law lay out normative foundations of disaster management. The law seeks to promote sustainable use of land and liveable communities which integrate human needs in any locality; ensure that development activities are planned in a manner that integrates economic, social and environmental needs of present and future generations.⁷⁶

c) The National Drought Management Authority Act (NDMA) 2016

The provisions of NDMA embrace all phases of disaster management and establish the institutional framework. The Act establishes the National Drought Management Authority,⁷⁷ whose functions is to exercise overall coordination over all matters relating to drought management including implementation of

⁷⁴ Dedan Ong'anya, 'The Effect of Land Use Planning on Economic Vulnerability to Disaster Management in Low Income Neighbourhoods of Eldoret Urban Area, Kenya' (PhD in Disaster Management and Sustainable Development of Masinde Muliro University of Science and Technology 2020) 3.

⁷⁵ Ibid 78.

⁷⁶ PLUPA, s 6.

⁷⁷ NDMAA, s 3.

policies and programmes relating to drought management and to coordinate drought response initiatives being undertaken by other bodies, institutions and agencies.⁷⁸

d) Explosives Act

The Explosives Act⁷⁹ regulates the manufacture, storage, sale, transport, importation, exportation and use of explosives. Without regulation, some activities could lead to disasters resulting in the loss of lives, destruction of property and the environment. There are supporting regulations such as the Minerals & Mining (Explosives) Regulations 2012, that regulate the use of explosives in mining activities.

e) The Pharmacy and Poisons Act

The Act⁸⁰ regulates the control and trade of drugs and poisons. The Act regulates pharmacists and other professionals to ensure that only qualified people handle drugs and poisons, which can lead to disasters if not controlled.

f) The Medical Practitioners and Dentists Act

Medical practitioners are personnel who are critical in giving treatment to victims in disasters, where necessary which helps reduce impact of disasters. The Act⁸¹ regulates the management of medical professionals to ensure only quality services are given in order to protect the population.

g) The Food, Drugs and Chemical Substances Act

The Act⁸² seeks to prevent of adulteration of food, drugs and chemical substances without which their consumption may lead to loss of lives. Proper regulation forms important prevention measures that ensure disasters are averted.

⁷⁸ NDMAA s5.

⁷⁹ Explosives Act, Chapter 115, Laws of Kenya.

⁸⁰ The Pharmacy and Poisons Act Chapter 244, Laws of Kenya.

⁸¹ The Medical Practitioners and Dentists Act Chapter 253, Laws of Kenya.

⁸² The Food, Drugs and Chemical Substances Act Chapter 254, Laws of Kenya.

h) The National Cereals and Produce Board Act

The Act⁸³ seeks to regulate and control the marketing and processing of maize, wheat and scheduled agricultural produce. The functions of the National Cereals and Produce Board⁸⁴ are: to regulate or to control the collection, movement, storage, sale, purchase, transportation, marketing, processing, distribution, importation, exportation, disposal and supply of maize, wheat and scheduled agricultural produce; to buy, store, sell, import, export or otherwise acquire and dispose of maize, wheat and scheduled agricultural produce in such manner, such quantities and on such terms as it may, from time to time, deem necessary to fulfil the requirements of producers and consumers in Kenya; to advise the Minister on the proper production of maize, wheat and scheduled agricultural produce in relation to the needs of Kenya, and the extent to which control over the exportation and importation of maize, wheat or scheduled agricultural produce is desirable or necessary.⁸⁵ The purpose of the Act is to ensure that the country is food secure; which averts disasters resulting from drought and famine which impacts on the availability of food to the people.

i) The Preservation of Public Security Act

An Act⁸⁶ makes provision for the preservation of public security which includes disaster management. The law mandates the President to make regulation for preservation of public security. Section 2 of the Act describes “the preservation of public security” to include among other things, securing of the fundamental rights and freedoms of the individual; securing of the safety of persons and property; maintenance of the administration of justice; the provision of a sufficiency of the supplies and services essential to the life and well-being of the community, their equitable distribution and availability at fair prices; and the provision of administrative and remedial measures during periods of actual or apprehensible national danger or calamity, or in consequence of any disaster or destruction arising from natural causes.

⁸³ National Cereals and Produce Board Act (Chapter 338, Laws of Kenya).

⁸⁴ Ibid, s 5.

⁸⁵ Ibid.

⁸⁶ The Preservation of Public Security Act, Chapter 57, Laws of Kenya.

j) Public Order Act

An Act⁸⁷ of Parliament to make provision for the maintenance of public order within the context of organisation of groups formed to challenge the work of the police and the military and management of protests and processions. Failure to regulate such activities may lead to loss of lives and destruction of property and environment. The police are critical in ensuring proper coordination of response activities to a disaster.⁸⁸

k) Public Health Act

The Public Health Act⁸⁹ governs aspects of sanitation, infectious disease control which constitute preventive measures that can avert disasters. The Act makes provision for malaria control measures failure to which may lead to loss of lives and or poverty related outcomes.⁹⁰ The protection of public health is important in times of disaster management to prevent further loss of lives and loss of property through crimes.

l) Health Act

The Act provides a framework for the state to fulfill the duty to observe, respect, protect, promote and fulfill the right to the highest attainable standard of health by developing policies, laws and other measures necessary to protect, promote, improve and maintain the health and well-being of every citizen.⁹¹ The rights need to be protected in times of disasters especially when they impact on peoples' health. The two levels of government, namely the national and county governments have a role to play in disaster management. The national government (NG) is required to establish and implement measures such as disease surveillance, health impact assessment in the event of occurrences that

⁸⁷ Public Order Act, Chapter 56, Laws of Kenya.

⁸⁸ Ross Prizzia, "The Role of Coordination in Disaster Management" in Disaster Management Handbook <chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://web.archive.org/web/20200319224831id_/http://dspace.lib.hawaii.edu/bitstream/10790/3357/1/prizzia.r-2008-0036.pdf> accessed October 28, 2025.

⁸⁹ Public Health Act, Chapter 242, Laws of Kenya.

⁹⁰ Public Health Act, s 136-143.

⁹¹ Health Act, (No 21 of 2017) s 4 (a),5.

may impact the health of the population.⁹² The NG manages national referral health facilities and sets standards for disaster response. Through standards and guidelines, the NG promotes public health prevention, limitation, or suppression of preventable diseases, including those which may result from disasters. The NG coordinates with counties in mobilising resources for disasters.⁹³

The county government supports appropriate public health response activities where incidents impact on the health of the population.⁹⁴ The Cabinet Secretary is expected to coordinate government agencies in addressing incidents which largely impact on public health.⁹⁵ The CS may declare public health emergencies, exercise their power isolate; mobilize resources, and enforce measures like vaccination or movement restrictions in case of epidemics.⁹⁶

m) National Police Service Act (NPSA)

NPSA provides the framework of engagement for National Police Service (NPS) who are mandated to give services for the purpose of protection of the public and property. Some of the functions of the head of NPS, the Inspector-General, are to implement policy decisions; co-ordinate all police operations; advise the government on policing matters and services and to monitor the implementation of policy, operations and directions of the Service.⁹⁷ Some of the functions of the Administration Police Service who form part of NPS that are relevant to disaster management are providing assistance to the public; maintaining law and order; preserving peace; protecting life and property; rendering support to government agencies in the enforcement of administrative functions and the exercise of lawful duties.⁹⁸ The Kenya Police Service is required to maintain order on roads by regulating and controlling traffic and keeping order and preventing obstruction in public places.⁹⁹ Therefore, the police will keep order in public

⁹² Health Act, s 68 (2) (a), s 69 k-m.

⁹³ Health Act, s 11-15 .

⁹⁴ Health Act, s 19 (d) (f).

⁹⁵ Health Act, s 106, 108.

⁹⁶ Health Act, s 61-65.

⁹⁷ NPSA, (Act no 11A of 2011), s 10 (1) .

⁹⁸ NPSA, s 27.

⁹⁹ NPSA, s 54(1) .

places especially in instances of disasters.

n) The Climate Change Act (CCA)

The primary objective of CCA¹⁰⁰ is to provide for the development, management, implementation and regulation of mechanisms that enhance climate change resilience and low carbon development for sustainable development of Kenya.¹⁰¹ This objective is in line with the Preamble of the Constitution which speaks to the commitment for the people of Kenya in respecting the environment, nurturing and protecting the wellbeing of individuals, communities and nation. The Act provides for various climate **change adaptation, mitigation and disaster preparedness** as a strategic response to the vulnerability to climate-related disasters.¹⁰² The national government and county government are required to play a role in the development, management, implementation and regulation of mechanisms to enhance climate change resilience and low carbon development for the sustainable development of Kenya.¹⁰³

o) Environmental Management and Coordination Act (EMCA)

EMCA is the coordinating framework law for managing environmental issues which extends to disaster management and NEMA, which is established under the law, is mandated to oversee and coordinate all matters relating to the environment. NEMA is mandated to respond to incidents and initiate remedial actions where the environment is affected while collaborating with the lead institutions.¹⁰⁴ NEMA oversees the processes of environmental impact assessment and environmental monitoring which are important prevention measures to any foreseen or unforeseen harm from environment incidents and or disasters.¹⁰⁵

EMCA recognises principles of sustainable development that envisage the

¹⁰⁰ Climate Change Act, 2016 (amended in September, 2023).

¹⁰¹ Climate Change Act, section 3(1)

¹⁰² *ibid*

¹⁰³ Climate Change Act, s 3.

¹⁰⁴ EMCA s 7.

¹⁰⁵ EMCA s 7.

normative framework for disaster management. The principle of sustainable development is interpreted widely to include other principles like 'polluter pays principle'; public participation, precautionary and prevention principle.¹⁰⁶ EMCA just like other statutes cover enforcement which includes various aspects such as inspection, prosecution in the effort to promote compliance of the law. EMCA also provides a liability framework whose objective is to promote compliance of the law, hence reducing the events that may lead to disasters which may attract liability.¹⁰⁷

The requirement of conducting an environmental impact assessment on any proposed project likely to have an impact on the environment elucidates the prevention and the precautionary principle as well as the polluter pays principle.¹⁰⁸ The mechanism identifies potential risks of the project such as destruction of environment and prescribes measures that should be undertaken to mitigate harm to the environment. In the *Kevin Musyoka and Others v Attorney General another*¹⁰⁹ the court made a finding that the environmental impact assessment was improperly done for lack of public participation at the inception of operations of the lead smelter factory which later caused harm to the residents of *Owino Uhuru*. The court held that the environmental agency failed in its duty by allowing the company to start operations without an environmental impact assessment licence. Public participation allows the negative impacts of the project to be identified which allows prevention measures to be put in place therefore reducing the impact of environmental incidents.¹¹⁰

Other principles of sustainable development are the principles of intergenerational and intra-generational equity which imply that the needs of the present generations are considered as well as the needs of the future generations

¹⁰⁶ EMCA, S 3(5).

¹⁰⁷ EMCA, S3.

¹⁰⁸ EMCA, s58.

¹⁰⁹ [2016]eKLR.

¹¹⁰ Amor Mendoza, 'Examining the Evidentiary Value of Environmental Impact Statements in Toxic Tort Suits – A Philippine Case Study' (Degree of Juris Doctor University of the East, Philippines 2021) 19.

for purposes of sustainability of the scarce resources.¹¹¹ Failure to entrench such principles amounts to breach of the right to a clean and healthy environment. In *Peter Waweru v R*,¹¹² the principles were breached when the Kiserian business people sought to have the sewers drain their waste water into the Kiserian River hence ignoring the needs of the users of Kiserian River located in the downstream. The principles of intra and inter-generational equity are therefore relevant in disaster risk reduction as they implore on the developers to consider the needs of present and future generations, the very essence of the principle of sustainable development.

The “polluter pays principle” calls for internalization of costs by the polluter, which means that the polluter should pay up for: the cost of cleaning up any element of the environment damaged by pollution, compensation for victims of pollution, costs of beneficial uses lost as a result of an act of pollution.¹¹³ A court may order for clean up of the environment and compensation for the people where a polluter fails to pay up for the harm caused. In the *Peter Waweru case*¹¹⁴ judges considered the polluter pays principle in recommending the restoration of environment by the polluters to a status that could be used in a safer way by all the users of the Kiserian River.

EMCA further invokes criminal liability where there is ecological harm attributed to pollution incidents.¹¹⁵ Criminal liability is relevant in civil cases for injuries or harm attributable to the environmental incidents. The polluters are held strict liable for harm they cause.¹¹⁶ Further in addition to the orders for penalties which can be made, the court can make orders for removal, clean up of pollution and restoration of the degraded environment. For instance, one can be held criminally liable for contravention of pollution control standards for any discharge to the

¹¹¹ *Oposa v Factoran G.R.* No. 101083 (224 SCRA 792) Phillippines.

¹¹² *Peter K. Waweru v Republic* [2006] KEHC 3202 (KLR).

¹¹³ EMCA, s.2; Rio Declaration, Principle 16.

¹¹⁴ [2006]eKLR.

¹¹⁵ Mbote P, ‘The Use of Criminal Law in enforcing Environmental Law’ in Charles Okidi (Ed) *Environmental Governance in Kenya: Implementing the Framework Law*, Nairobi (School of Law, University of Nairobi 2008).

¹¹⁶ EMCA, s 55, s 72.

aquatic environment.¹¹⁷ One may be fined or imprisoned for a specified period not exceeding two years.¹¹⁸ In addition, one can be ordered to pay the cost of the removal of the polluting agent including the costs of restoration of the damaged environment which could be incurred by NEMA or any other government agency in charge of managing the polluted natural resource. One may be ordered to pay the cost incurred by the third party for reparation, or compensation as may be determined by a court of law.¹¹⁹ The legislation addresses administrative liability which does not cover personal injuries. The victims revert to litigation under common law, EMCA under section 3 or the constitutional law for compensation of their injuries. Such liability mechanisms are deterrent in nature which contributes in disaster risk reduction.

EMCA establishes a compensation fund under the National Environment Restoration Fund (NERF) consisting of such proportion of fees or deposit bonds donated or levied from industries and other projects proponents as a contribution towards the restoration fund.¹²⁰ NEMA may be required to use the funds to intervene in mitigation of environmental degradation.¹²¹ The restoration fund is a state kitty¹²² used as supplementary insurance for the mitigation of environmental harm especially where a polluter cannot be held responsible to restore the environment. Such a fund can be used to mitigate loss of damage in a disaster that affects the environment.

EMCA also provides for deposit bonds which can be source of compensation funds. NEMA is required to create a register of those activities and industrial plants and undertakings which have or are most likely to have significant adverse

¹¹⁷ EMCA, S 72 (1),; Water Act, s 309

¹¹⁸ Water Act, s 147.

¹¹⁹ EMCA , Water Act No 43 of 2016, s144,.

¹²⁰ EMCA, s 25(2).

¹²¹ EMCA, S 25(4).

¹²² Kariuki Muigua, 'Strengthening the Environmental Liability Regime in Kenya for Sustainable Development' April 2019 < <https://kmco.co.ke/wp-content/uploads/2019/09/Strengthening-the-Environmental-Liability-Regime-in-Kenya-for-Sustainable-Development-Kariuki-Muigua-26th-April-2019.pdf>> accessed February 15, 2021.

effects on the environment.¹²³ Where the operator does not abide by the conditions given by the authority, the Authority may, after hearing the operator, confiscate a deposit bond where the operator is responsible for adverse environmental practices that are in breach of the provisions of EMCA.¹²⁴ The Authority may in addition cancel any licence issued to the operator if the Authority is satisfied that the operator has become a habitual offender.¹²⁵ If dissatisfied with the confiscation of his deposit bond the operator may refer the matter to a competent court of law.¹²⁶ The proceeds of every refundable deposit bond ought to be paid into the restoration fund and can only be refunded to the depositor where necessary.¹²⁷ The deposit bonds can be utilized administratively where an operator harms the environment without going through the rigours of litigation which can be ineffective in cases where the polluter is insolvent or cannot be traced or where a case takes a long time to be concluded.¹²⁸ The bond mechanisms contribute in deterring behaviours that would result in disasters. The legislative framework for environmental incidence response activities under EMCA is critical in disaster management.¹²⁹ NEMA is a critical player in responding to environmental incidents and initiating remedial actions that may be needed while working in collaboration with the lead institutions. Such incidents may be disasters depending on the extent of damage. The remedial measures consist of site assessment processes, monitoring, and inspections, clean up and restoration measures.¹³⁰ Measures are spelled out in environmental impact assessment licence that help in mitigation of harm and remediation of

¹²³ EMCA, S 28 (1).

¹²⁴ EMCA, S 28(4).

¹²⁵ EMCA, S 28 (4)

¹²⁶ Section 28 (5) EMCA.

¹²⁷ Section 28(6) EMCA.

¹²⁸ Michael G. Faure Tom Vanden Borre, 'Compensating Nuclear Damage: A Comparative Economic Analysis of the U.S. and International Liability Schemes,' (2008) 33 Wm. & Mary Envtl. L. & Pol'y Rev 266

¹²⁹ EMCA, s 9 (2) (k)

¹³⁰ Jolanta Kwiatkowska – Malina, 'Environmental Compensation and impacts of road investments in EIA in Poland' [2016] *Infrastructure and Ecology of Rural Areas* 644. <https://www.researchgate.net/publication/320758230_Environmental_compensation_and_mitigation_impacts_of_road_investments_in_EIA_in_Poland> accessed January 28, 2021.

environment where necessary. Environmental inspectors ensure that remedial measures are undertaken in order to address harm.¹³¹

Upon visiting the site of an environmental incident, environmental inspectors may issue restoration orders that indicate specific response activities that should be undertaken by the polluter in order to repair the environment.¹³² An inspector may also stop a potential polluter from polluting the environment;¹³³ make orders for the polluter to award compensation to other persons whose environment or livelihood has been harmed;¹³⁴ levy a charge on the polluter which in the opinion of NEMA represents a reasonable estimate of the costs of any action taken by an authorised person or organisation to restore the environment to the state in which it was before pollution."¹³⁵

In managing the response actions the environment inspector has the mandate to:¹³⁶ *enter any land, premises to make examinations and enquiries to determine whether the provisions of EMCA are complied with;*¹³⁷ *require the production of, inspect, examine and copy licences, registers, records and other documents relating to EMCA or any other law relating to the environment;*¹³⁸ *take samples of any articles and substances relating to pollution and submit such samples for test and analysis;*¹³⁹ *order the immediate closure of any manufacturing plant or undertaking which pollutes or is likely to pollute the environment*¹⁴⁰ *and to require the owner or operator of such undertaking to implement any remedial measures that the environmental inspector may direct in the notice closing down the establishment or undertaking,*¹⁴¹ *and arrest any person whom he reasonably believes has committed an offence under EMCA;*¹⁴² *install any equipment on any land,*

¹³¹ Interview with NEMA Environmental Inspector (October 6, 2021).

¹³² EMCA, s 108(2) (a)

¹³³ EMCA, s 108(2) (b).

¹³⁴ EMCA, s 108(2) (c).

¹³⁵ EMCA, s 108(2) (d).

¹³⁶ EMCA, s 117(3).

¹³⁷ EMCA, s 117 (3)(a).

¹³⁸ EMCA, s 117 (3) (b)

¹³⁹ EMCA, s 117 (3) (c)

¹⁴⁰ With the written approval of the Director-General.

¹⁴¹ EMCA, s 117 (3) (f).

¹⁴² EMCA, s 117 (3) (g) s 117 (3) (h).

*premise, vessel or motor vehicle for purposes of monitoring compliance with EMCA.*¹⁴³

Any failure or laxity on the part of NEMA may spell serious consequences for the people and environment there being no mandatory involvement of other government sectors. The courts may give orders for stopping pollution and restoration orders where petitioned for the same. The court may other orders such as: compelling a public officer to take measures to prevent or discontinue any act or omission deleterious to the environment; or issuing orders for an environment audit, compensation for any victim of pollution and the cost of beneficial uses lost as a result of an act of pollution and related losses.¹⁴⁴ The court is ordinarily involved where NEMA fails to undertake satisfactory response measures in the view of the victims of pollution.

Before response measures are initiated by NEMA, they must be classified according to the National Incident Classification Scheme¹⁴⁵ to establish the nature measures and resources that will be deployed to address the environmental incident.¹⁴⁶

p) Petroleum Act

The Petroleum Act provides a framework for the contracting, exploration, development and production of petroleum as well as the cessation of upstream petroleum operations.¹⁴⁷ The legislation offers important norms for disaster management. The framework helps to locate liability in case of oil spills or other incidents that may result in harm. In response to oil spills, the operator or person responsible must undertake immediate clean-up of the polluted or damaged environment.¹⁴⁸ The operator is expected to notify the authorities within 48 hours in case of any environmental incident such as an oil spill.¹⁴⁹ An operator in

¹⁴³ EMCA, s117 (3) (i)..

¹⁴⁴ Section 3(3), EMCA.

¹⁴⁵ FAQs on incident management”
<https://www.nema.go.ke/index.php?option=com_content&view=article&id=194&Itemid=336>

¹⁴⁶ Interview with Environmental Incident Inspector (Nairobi, 7 May 2021)

¹⁴⁷ Petroleum Act (Act No 2 of 2019).

¹⁴⁸ Petroleum Act, S 97.

¹⁴⁹ Petroleum Act, S 63.

upstream petroleum operations is required to maintain requirements for emergency efficient measures for emergency preparedness with a view to dealing with incidents which may lead to loss of life or personal injury, pollution or damage to property. The measures help to prevent or reduce harmful effects, and measures may include environmental restoration so that the environment is restored as much as possible to its original condition prior to commencement of operations.¹⁵⁰ An operator of a petroleum business is expected to comply with the environmental, health and safety laws and in case of an oil spill, fire, injury the operator is required to clean up the contamination at own expense and in accordance with an oil clean up plan drawn in compliance with the national oil spill policy.¹⁵¹

The legislation requires the Cabinet Secretary to establish a disaster preparedness, prevention and management unit to co-ordinate response to accidents, disasters and management other emergencies that may occur within upstream unit. The unit is expected to collaborate with the National Disaster Operations Centre, County governments and other relevant institutions to ensure a timely response and emergency preparedness resource sharing.¹⁵²

Kenya has experienced several oil spills that has involved spillage of petroleum products resulting in pollution of the environment. The Makueni, Thange oil spill is notable due to the wide extent of pollution of the environment. NEMA ordered the operator Kenya Pipeline Company to clean up the contaminated area.¹⁵³ The operator through the insurer compensated residents of the damaged property which included farmlands and loss of produce.¹⁵⁴

There are strict enforcement measures to promote compliance of the law. Strict penalties are put in place for non-compliance with safety regulations by oil

¹⁵⁰ Petroleum Act, s 67.

¹⁵¹ Petroleum Act, s 97.

¹⁵² Petroleum Act, s 69.

¹⁵³ Kenya Pipeline Limited, Panafcon Limited, Environmental and Social-Economic Impact Assessment Study of *Thange River Basin*- Vol A (d).

¹⁵⁴ CIC Legal Officer

companies. Section 97(1) of the Petroleum Act, 2019 obligates persons engaged in petroleum business to comply with applicable environment, health and safety laws. Such provisions offer deterrent measures which are critical in preventing disaster occurrences.

q) Water Act

Water can be a source of disaster depending on the impact. Polluted water can be a source of harm to human, animals and the environment at large. A number of things may cause water pollution such as water run off that contains pesticides, heavy metals, and other chemical compounds, contaminated effluent due to sewage and industrial waste.¹⁵⁵ Water pollution attracts criminal liability where one is found culpable.¹⁵⁶ An occupier of land adjacent to water sources are supposed to use their land or the water source in a way that does not pollute the water. This may require putting up adequate measures for safe disposal of solid waste and agrochemicals.¹⁵⁷ One can be ordered to stop the polluting activities and undertake clean up and restoration measures.¹⁵⁸ The county government or NEMA can undertake restoration works to avert disasters and later sue for reimbursement before the water tribunal. In case of injuries attributable to water pollution one has to prove their claims more so identifying the polluter causing damage. The liability measures are important to deter activities which may lead to disasters.

r) Public Finance Management Act, (PFMA) 2012

PFMA provides the financial framework within which disaster risk management strategies are implemented. The Public Finance Management (National Drought Emergency Fund) Regulation, 2021 specifically addresses the establishment of emergency funds by county governments under Section 110 of the PFM Act, 2012,

¹⁵⁵ Hannah Wamuyu *et al*, 'Compensating Toxic Torts in Kenya: Overcoming the Causation Dilemma' 12 (2021) 2 *Journal of Sustainable Development, Law and Policy* 259.

¹⁵⁶ S 143 Water Act No 3 of 2016.

¹⁵⁷ Water Resources Regulations Legal not 170 of 2021, Reg 71.

¹⁵⁸ EMCA, s 71.

ensuring that resources are available for disaster preparedness and response.¹⁵⁹

s) Forests Conservation and Management Act 2016

The Act provides for the conservation, sustainable management, and utilization of forests in Kenya. It contributes to disaster risk management by promoting ecosystem restoration and protection, which helps reduce risks such as floods, landslides, and droughts.¹⁶⁰

t) Nuclear Regulatory Act, 2019

The law mandates the Nuclear Regulatory Authority to work together with the national body or authority responsible for responding to national emergencies in carrying out some functions such as defining the criteria for classification of emergencies; reviewing and approving emergency preparedness and response plans developed by an authorised person; and advising and providing technical support on radiological emergencies and nuclear accidents.¹⁶¹ The authorized person is expected to implement the emergency preparedness and response plan as approved by the authority in the event of a nuclear or radiological emergency.¹⁶² Currently, Kenya does not have a national body established to respond to national emergencies. Various government agencies come together to respond to emergencies which requires perfect coordination.

3.3 Managing Disasters in Kenya

Cholera disease outbreaks are common when floods occur in Kenya. Floods lead to massive displacement of people and contamination of water sources from latrines and other sanitation facilities. The Ministry of Health has been at the forefront in managing cholera outbreaks following floods and has always received support from organisations like the WHO and other aid organisations which may not be sustainable.¹⁶³ This is reactive and so better outcomes can be

¹⁵⁹ Ministry of Interior & National Administration, 'National Disaster Risk Management Strategy 2025-2030' 6.

¹⁶⁰ Ibid.

¹⁶¹ Nuclear Regulatory Act s 57.

¹⁶² Nuclear Regulatory Act, s 60.

¹⁶³ 'Kenya steps up national Cholera Preparedness and Response' 22 May 2025

achieved if prevention measures by ensuring flood risks are averted. In urban areas the county governments should ensure proper infrastructure for drainage is installed and maintained to allow free flow of stormy waters.

Kenya has suffered landslides leading to loss of lives, debilitating injuries and loss of property. During the long rains in April 2024, a landslide occurred in Mai Mahiu which killed over 130 people¹⁶⁴ and left scores injured and loss of property.¹⁶⁵ The landslide was a culmination of multiple landslides, which led to debris flow towards the low-lying areas. Landslides were reported in an area with depleted forest cover.¹⁶⁶ Both national and county governments, with the support of non-government organisations, joined efforts to help the disaster victims. The national government promised resettlement as part of recovery, but it has never materialized.¹⁶⁷ The victims petitioned Parliament for resettlement due to the failed promises.¹⁶⁸ Kenya National Human Rights Commission sued the government on behalf of the victims for compensation. The government was accused of failure to implement a timely response plan, having received timely warnings from the meteorological department that there were going to be heavily rains that were potentially disastrous.¹⁶⁹

Elgeyo Marakwet County in Kenya has suffered recurrent landslides in the last

<<https://www.afro.who.int/photo-story/kenya-steps-national-cholera-preparedness-and-response>>accessed October 22, 2025.

¹⁶⁴ Some of whom were reported missing.

¹⁶⁵ Dave Petley, 'The Mai Mahiu Land Disaster in Kenya' (1 May 2024) <https://eos.org/thelandslideblog/mai-mahiu> accessed November 4, 2025; Amref, 'Mai Mahiu Tragedy: Stories of Loss and Resilience' June 20, 2024 <https://newsroom.amref.org/blog/2024/06/mai-mahiu-tragedy-stories-of-loss-and-resilience/> accessed November 4, 2025.

¹⁶⁶ Ibid.

¹⁶⁷ Antony Gitonga, 'Mai Mahiu flood victims petition Parliament over their failed resettlement' (June 23, 2025) <https://www.kbc.co.ke/mai-mahiu-flood-victims-petition-parliament-over-their-failed-resettlement/> accessed November 4, 2025.

¹⁶⁸ Ibid.

¹⁶⁹ Ernest Cornel, 'Kenyan Government Officials sued over Fatal Flooding' (May 17, 2024) <https://khrc.or.ke/news/kenyan-government-officials-sued-over-fatal-flooding/> November 4, 2025.

decade causing damage. The disasters will keep recurring due to the challenge of climate change. There is an indication that the construction of dams and reafforestation would mitigate these disasters.¹⁷⁰ The national and county government must adopt climate adaptation and mitigation seriously for effective disaster management.

Kenya has also faced massive displacement and loss of property due to rising lakes along great Rift Valley. About 4000 families have been displaced in Naivasha area as water from the lake has submerged homes and other property. The residents have reverted to issuing threats to the county government for action.¹⁷¹ A similar phenomena has been observed in the area surrounding Lake Baringo. There is no clear approach for managing these disasters.

There is no unified law for disaster management. The National Disaster Risk Management Bill 2023, yet to be enacted. The Bill presents a collaborative framework for disaster management within the country. Several counties have disaster management legislation, meaning each deals with disasters its own way, which is a fragmented approach that may not yield optimal outcomes due to coordination challenges. Without proper collaboration there is a real danger of duplication of efforts where different institutions or stakeholders scramble to respond to disasters. The realization of the right to a clean and healthy environment requires collaboration of different institutions like the county authorities and NEMA. Lack of coordination is a challenge as shown in the case of *Kevin Musyoka and others v AG*¹⁷² which led to disastrous effects on the people and the ecology.

3.4 Conclusion

The state is required by law to take policy and legislative measures to protect and

¹⁷⁰ S Kibet, 'The Role of Forest cover in Landslides Risk Reduction in Marakwet East Escarpment, Elgeyo Marakwet County, Kenya (Thesis, University of Nairobi 2021).

¹⁷¹ Anthony Gitonga, 'Number of Families displaced by Lake Naivasha shoots up' (November 3, 2025) <https://www.standardmedia.co.ke/rift-valley/article/2001533340/number-of-families-displaced-by-lake-naivasha-shoots-up> accessed November 4, 2025.

¹⁷² *Kevin Musyoka and others v AG* KLR [2016].

guarantee life, dignity, and the protection of property in disaster management. Kenya relies on numerous policies and laws and executive directives for disaster management. The National Disaster Risk Management Bill presents a framework that allows for better coordination; which law if enacted could result in improved disaster management. The executive is guided by policies, presidential directives and the available law to manage the disasters in the country. A delay in response to disasters may occur due to the challenge of coordination. Disaster management has often been more reactive than proactive. The executive authority will make a call to action where the disaster is deemed major. There have been no effective action to mitigate disasters such as landslides/mudslides by constructing dams and or restoring degraded areas.¹⁷³ Such effort has been marred by corruption a characteristic of failure to uphold rule of law which impedes effective disaster management.¹⁷⁴

¹⁷³ See(n 167).

¹⁷⁴ John Kamau, 'Arror & Kimwarer: Dams that time left behind and Kenya chose to forget' (Daily Nation October 5, 2025 <https://nation.africa/kenya/weekly-review/arror-and-kimwarer-dams-that-time-left-behind-and-kenya-chose-to-forget-5217606#story> accessed November 4, 2025).

Bibliography

International Law

Rio Declaration, UN Doc. A/CONF. 151/26 (Vol. I), 12 August 1992

John Knox, 'Framework Principles on Human Rights and the Environment (UN Human Rights Special Procedures' (UNEP Special Rapporteurs, Independent Experts and Working Groups, 2018)

UN Declaration on Human Right to a Clean, Healthy and Sustainable Environment A/76/L.75.

UNGA, 'Implementation of the Sendai Framework for Disaster Risk Reduction 2015–2030', Report of the Secretary General, UN Doc. A/75/226 (23 July 2020)

National Law

Oposa v Factoran G.R. No. 101083 (224 SCRA 792) Phillippines.

Peter K. Waweru v Republic [2006] KEHC 3202 (KLR).

Climate Change Act, (No 11 of 2016) Laws of Kenya

Environmental Management and Coordination Act (Chapter 387) Laws of Kenya

Explosives Act (Chapter 115) Laws of Kenya.

Food, Drugs and Chemicals Substances Act (Chapter 244) Laws of Kenya

Forests Conservation and Management Act (No. 34 of 2016) Laws of Kenya

Health Act (no 21 of 2017) Laws of Kenya

Intergovernmental Relations Act; The Delineation of Disaster Management Function (Legal Notice 86 of 2021)

National Cereals and Produce Board Act (Chapter 338) Laws of Kenya

National Disaster Risk Management Policy, 2017

National Disaster Risk Management Strategy (2025-2030)

National Police Service Act (no 11A of 2011) Laws of Kenya

Nuclear Regulatory Act (No 29 of 2019) Laws of Kenya

Petroleum Act (No 2 of 2019) Laws of Kenya.

Pharmacy and Poisons Act, Chapter 244 Laws of Kenya

Physical and Land Use Planning Act, (No. 13 of 2019) Laws of Kenya

Preservation of Public Security Act, Chapter 57 Laws of Kenya

Public Health Act (chapter 242) Laws of Kenya

Public Order Act (Chapter 56) Laws of Kenya

Food, Drugs and Chemical Substances Act (Chapter 254) Laws of Kenya.

Medical Practitioner and Dentist Act (Chapter 253) Laws of Kenya

National Drought Management Authority Act 2016

Pharmacy and Poisons Act Chapter 244, Laws of Kenya.

Preservation of Public Security Act, Chapter 57, Laws of Kenya.
Minerals & Mining (Explosives) Regulations 2012,
Public Finance Management (Disaster Management Fund) Regulations, 2022
Public Finance Management (National Drought Emergency Fund) Regulation, 2021
Water Act (No 43 of 2016) Laws of Kenya
Water Resources Regulations Legal not 170 of 2021, Reg 71.

Articles

Alphonse Ndar, A Critical Analysis of Kenya's Disaster Management Strategy, 2019

Amor Mendoza, 'Examining the Evidentiary Value of Environmental Impact Statements in Toxic Tort Suits – A Philippine Case Study' (Degree of Juris Doctor University of the East, Philippines 2021).

Anthony Gitonga, 'Number of Families displaced by Lake Naivasha shoots up' (November 3, 2025) <https://www.standardmedia.co.ke/rift-valley/article/2001533340/number-of-families-displaced-by-lake-naivasha-shoots-up> accessed November 4, 2025.

Antony Gitonga, 'Mai Mahiu flood victims petition Parliament over their failed resettlement' (June 23, 2025) <https://www.kbc.co.ke/mai-mahiu-flood-victims-petition-parliament-over-their-failed-resettlement/> accessed November 4, 2025.

Dave Petley, 'The Mai Mahiu Land Disaster in Kenya' (1 May 2024) <https://eos.org/thelandslideblog/mai-mahiu> accessed November 4, 2025; Amref, 'Mai Mahiu Tragedy: Stories of Loss and Resilience' June 20, 2024 <https://newsroom.amref.org/blog/2024/06/mai-mahiu-tragedy-stories-of-loss-and-resilience/> accessed November 4, 2025.

Dedan Ong'anya, 'The Effect of Land Use Planning on Economic Vulnerability to Disaster Management in Low Income Neighbourhoods of Eldoret Urban Area, Kenya' (PhD in Disaster Management and Sustainable Development of Masinde Muliro University of Science and Technology 2020)

Dinah Shelton, Stockholm Declaration (1972) and Rio Declaration (1992) (Oxford Public International Law- Max Planck Encyclopaedia of Public International Law Ernest Cornel, 'Kenyan Government Officials sued over Fatal Flooding' (May 17, 2024) <https://khrc.or.ke/news/kenyan-government-officials-sued-over-fatal-flooding/> November 4, 2025.

FAQs on incident management"
<https://www.nema.go.ke/index.php?option=com_content&view=article&id=194&Itemid=336>

Hannah Wamuyu *et al*, 'Compensating Toxic Torts in Kenya: Overcoming the

- Causation Dilemma' 12 (2021)2 Journal of Sustainable Development, Law and Policy.
- Irene Rotich, 'Disaster Management in Kenya' 24(1) [2019] IOSR Journal of Humanities and Social Science
- Jiapeng Dai & Aisha Azhar, Collaborative Governance in Disaster Management and Sustainable Development (2024) Public Administrative Development .
- John Kamau, 'Arror & Kimwarer: Dams that time left behind and Kenya chose to forget' (Daily Nation October 5, 2025 <https://nation.africa/kenya/weekly-review/arror-and-kimwarer-dams-that-time-left-behind-and-kenya-chose-to-forget-5217606#story> accessed November 4, 2025.
- Jolanta Kwiatkowska - Malina, 'Environmental Compensation and impacts of road investments in EIA in Poland' [2016] Infrastructure and Ecology of Rural Areas 644.?https://www.researchgate.net/publication/320758230_Environmental_compensation_and_mitigation_impacts_of_road_investments_in_EIA_in_Poland > accessed January 28, 2021.
- Joseph Owuondo, 'Review of Disaster Preparedness and Management Techniques in Kenya' VI (VII) [2022]International Journal of Research and Innovation in Social Science.
- Julius Huho et al, Profiling Disasters in Kenya and their Causes (2016)7 (1) Academic Research International .
- Kariuki Muigua, 'Strengthening the Environmental Liability Regime in Kenya for Sustainable Development' April 2019 < <https://kmco.co.ke/wp-content/uploads/2019/09/Strengthening-the-Environmental-Liability-Regime-in-Kenya-for-Sustainable-Development-Kariuki-Muigua-26th-April-2019.pdf>> accessed February 15, 2021.
- Kenya Institute Public Policy Research and Analysis, National Disaster Risk Management Policy 2017 <https://repository.kippira.or.ke/items/b8552484-8af1-4b36-a43d-f236fcc0ba2b>
- Kenya Pipeline Limited, Panafcon Limited, Environmental and Social-Economic Impact Assessment Study of *Thange* River Basin- Vol A (d).
- Marion Mutugi & Samuel Maingi, Disasters in Kenya: A major public health concern, International Journal of Public Health and Epidemiology Vol. 8 (9) 2019.
- Mbote P, 'The Use of Criminal Law in enforcing Environmental Law' in Charles Okidi (Ed) *Environmental Governance in Kenya:Implementing the Framework Law*, Nairobi (School of Law, University of Nairobi 2008).
- Michael G. Faure and Tom Vanden Borre, 'Compensating Nuclear Damage: A Comparative Economic Analysis of the U.S. and International Liability Schemes,' (2008) 33 Wm. & Mary Env'tl. L. & Pol'y Rev

Ross Prizzia, "The Role of Coordination in Disaster Management" in Disaster Management Handbook <chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://web.archive.org/web/20200319224831id_/http://dspace.lib.hawaii.edu/bitstream/10790/3357/1/prizzia.r-2008-0036.pdf> accessed October 28, 2025.

S Kibet, 'The Role of Forest cover in Landslides Risk Reduction in Marakwet East Escarpment, Elgeyo Marakwet County , Kenya (Thesis, University of Nairobi 2021).

The National Policy for Disaster Management in Kenya 2017; ISDR (2002).

Living with Risk, *A global Review of Disaster Reduction Initiatives*, Preliminary version, pp 24-25. Geneva, Switzerland.

Vahid Delshad et al, "International Agreements on Disaster Risk Management Based on World Conferences, Successful or Not: A Review Study" 6 (1) 2020 *Health in Emergencies and Disasters Quarterly*.

Vahid Delshad et al, "International Agreements on Disaster Risk Management Based on World Conferences, Successful or Not: A Review Study" 6 (1) 2020 *Health in Emergencies and Disasters Quarterly*.

Yena Chong, 'International Legal Framework for Disaster Management-Responsibilities of States and the International Community' (Masters Thesis of International Studies- Seoul national University 2024)

Journal of Appropriate Dispute Resolution (ADR) & Sustainability Review, Vol. 4 Issue 1

By: Mwati Muriithi*

Volume 4, Issue 1 of Journal of Appropriate Dispute Resolution (ADR) & Sustainability is the first issue of the Journal in the year 2026 aimed at a worldwide audience and is focused on disseminating knowledge and creating a platform for scholarly debate on pertinent and emerging areas in the fields of Dispute Resolution and Sustainability.

The Journal is peer reviewed and refereed in order to adhere to the highest quality of academic standards and credibility of information. Papers submitted to the Journal are taken through a rigorous review by our team of internal and external reviewers.

It is edited by Prof. Kariuki Muigua Ph.D, SC, FCI Arb, Ch.Arb, OGW who has earned his reputation as a distinguished legal practitioner in Kenya and a leading environmental scholar in Africa and the world. It adopts an open publication policy and does not discriminate against authors on any grounds.

Prof. Kariuki Muigua Ph.D, SC, FCI Arb, Ch.Arb, OGW has demonstrated his prowess and sound understanding of Sustainability and Conflict Management in his paper ‘Oil and Gas Extraction in Africa: Employing ESG Tenets for Sustainability and Conflict Management’. The paper discusses how sustainability and conflict management can be infused in the oil and gas sector in Africa. The paper notes that Africa has a rich oil and gas sector due to the availability of viable deposits of these vital natural resources in the continent.

‘Comparative Analysis of Technology Dispute Resolution: A Study of the European Union and the United States’ by Dr. Amos William Omolo contributes to the development of more effective and accessible dispute resolution mechanisms.

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The paper contributes to the existing body of knowledge on dispute resolution by providing a comprehensive comparative analysis of technology disputes in the EU and the US.

Michael Sang in *'National Security Implications of the International Court of Justice's Judgment in the Maritime Delimitation Dispute between Kenya and Somalia'* explores the multifaceted impacts of the ICJ ruling, focusing on regional stability, economic interests and bilateral relations. The paper proposes actionable strategies such as establishing a mutually binding enforcement agreement, reviving the Somalia-Kenya Joint Commission for Cooperation, enhancing regional strategic security cooperation, and initiating comprehensive state-building programs.

'Yes, To Peace, But on Whose Terms? A Critical Appraisal of Community-Based Mediation in Natural Resource Conflicts in Kenya' by Raphael Okochil critically appraises the effectiveness of community-based mediation in resolving natural resource conflicts in Kenya by questioning the legitimacy, inclusivity and sustainability of these processes. The paper argues that even though these initiatives provide valuable spaces for conflict management, most of the time, they end up producing short-lived peace that is devoid of the actual causes of the conflict.

'Pan-Africanism and Climate Justice: Achieving Integrated Environmental Governance for Sustainability' by Prof. Kariuki Muigua PhD, SC critically examines how the ideal of climate justice can be attained in Africa. The paper argues that fostering climate justice in Africa is an urgent and necessary ideal in light of the disproportionate impacts of climate change on people and communities in the continent. The paper discusses how climate change adversely affects Africa.

Teddy J. O. Musiga in *'Judicial Approaches to the Determination of Funerary Disputes in Kenya'* examines how Kenyan courts have navigated funerary disputes, highlighting the challenges posed by diverse family structures, competing cultural expectations, and evolving burial preferences. The paper concludes by advocating for a clear statutory regime to harmonise customary practices with

constitutional principles of dignity and justice, while also recognising emerging modes of body disposition such as resomation and promession.

Mwati Muriithi critically reviews '*Journal of Conflict Management and Sustainable Development Volume 13 Issue 1*' which is the first issue of the Journal in the year 2026 and it has continued to grow as a key academic resource in the fields of Conflict Management, Sustainable Development and related fields of knowledge. The Journal is now one of the most cited and authoritative publications in the fields of Conflict Management and Sustainable Development.

Lastly, Michael Sang in '*Cybercrime and the Protection of Critical Infrastructure in Kenya: Proposals for Statutory Reform*' explores the protection of critical infrastructure in Kenya from the growing threat of cybercrime and cyber-enabled crimes. The paper argues that the current legal framework fails to address emerging threats such as artificial intelligence (AI)-driven cyberattacks, cryptocurrency-based money laundering, and the misuse of virtual assets.

Renewable Energy for a Sustainable Future? Moving towards Just Transition, Clean Air, One Health and Net Zero in the African Context

By: Kariuki Muigua*

Abstract

This paper examines ways through which Africa can transition to renewable energy for sustainable future. The paper notes that Africa has a rich renewable energy potential due to the abundance of solar, wind and geothermal among other renewables in the continent. It asserts that renewable energy provides many advantages in the quest for Sustainable Development in Africa. The paper discusses the benefits that Africa can derive from its vast renewable energy sources. Despite being endowed with renewable energy, the paper notes that Africa is yet to fully utilise this potential. It examines some of the barriers hindering the adoption of renewable energy in Africa. In light of these challenges, the paper discusses how Africa can effectively embrace renewable energy for a sustainable future by moving towards just transition, clean air, One Health and net zero.

1.0 Introduction

Renewable energy is a form of energy that is derived from natural sources that are replenished at a higher rate than they are consumed¹. Renewable energy has also been defined as energy that is generated from natural sources and processes that are continuously replenished². It can also be described as non-fossil energy generated from natural non-depleting resources including but not limited to solar

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¹ United Nations., 'What is Renewable Energy?' Available at <https://www.un.org/en/climatechange/what-is-renewable-energy> (Accessed on 02/01/2026)

² What is Renewable Energy?., Available at <https://extension.psu.edu/what-is-renewable-energy> (Accessed on 02/01/2026)

energy, wind energy, biomass energy, biological waste energy, hydro energy, geothermal energy and ocean and tidal energy³. It has been observed that renewable energy is derived from sources such as sunlight and wind that are abundant and constantly being replenished⁴.

Renewable energy provides many benefits for people and planet. For example, generating renewable energy creates lower emissions than burning fossil fuels⁵. It has been observed that fossil fuels including oil, gas and coal, which dominate the global energy mix, are responsible for nearly two-thirds of global carbon dioxide emissions⁶. When burned to produce energy, fossil fuels release harmful greenhouse gases including carbon dioxide thus fuelling climate change⁷. Further, fossil fuels contribute to air pollution with severe impacts on human and ecosystem health⁸. In addition, it has been argued that since fossil fuels such as oil, gas and coal are non-renewable, they can be depleted and therefore, placing too much reliance on them can affect global energy security and supply⁹.

Adopting renewable sources of energy is therefore important for people and planet. These sources of energy are available in abundance, cheaper and are a healthier option for people and the planet¹⁰. It has been argued that renewable sources of energy including solar, wind, geothermal, hydropower, biofuels and others, are at the centre of the transition to less carbon-intensive and more sustainable energy systems towards tackling environmental challenges including

³ Energy Act, No. 1 of 2019, Government Printer, Nairobi

⁴ United Nations., 'What is Renewable Energy?' Op Cit

⁵ Ibid

⁶ United Nations., 'The Role of Fossil Fuels in a Sustainable Energy System' Available at <https://www.un.org/en/chronicle/article/role-fossil-fuels-sustainable-energy-system> (Accessed on 02/01/2025)

⁷ Ibid

⁸ Solomon. B., & Krishna. K., 'The Coming Sustainable Energy Transition: History, Strategies, and Outlook.' *Energy Policy* 39 (2011) 7422-7431

⁹ Ibid

¹⁰ United Nations., 'Climate Action.' Available at <https://www.un.org/en/climatechange/howcommunities-are-embracing-renewable-energy> (Accessed on 02/01/2026)

climate change and pollution while fostering energy security¹¹. This ideal is envisaged under the United Nations 2030 *Agenda for Sustainable Development*¹². Sustainable Development Goal (SDG) 7 seeks to ensure access to affordable, reliable, sustainable and modern energy for all with a focus on renewable energy¹³. Further, at a continental level, African Union's *Agenda 2063*¹⁴ sets out the need for energy transition in Africa. Agenda 2063 portrays the vision of a Continent where renewable energy including wind, solar, hydro, bioenergy, ocean tidal waves, geothermal and other renewables claim more than half of the energy consumption for households, businesses and organizations¹⁵. Transitioning to renewable sources of energy is therefore vital in fostering a sustainable future both globally and in Africa.

This paper examines ways through which Africa can transition to renewable energy for sustainable future. The paper notes that Africa has a rich renewable energy potential due to the abundance of solar, wind and geothermal among other renewables in the continent. It asserts that renewable energy provides many advantages in the quest for Sustainable Development in Africa. The paper discusses the benefits that Africa can derive from its vast renewable energy sources. Despite being endowed with renewable energy, the paper notes that Africa is yet to fully utilise this potential. It examines some of the barriers hindering the adoption of renewable energy in Africa. In light of these challenges, the paper discusses how Africa can effectively embrace renewable energy for a sustainable future by moving towards just transition, clean air, One Health and net zero.

¹¹ International Energy Agency., 'Renewables' Available at <https://www.iea.org/energy-system/renewables> (Accessed on 02/01/2026)

¹² United Nations General Assembly., 'Transforming Our World: the 2030 Agenda for Sustainable Development.' 21 October 2015, A/RES/70/1., Available at <https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf> (Accessed on 02/01/2026)

¹³ *ibid*

¹⁴ Africa Union., 'Agenda 2063: The Africa we Want.' Available at https://au.int/sites/default/files/documents/33126-doc-framework_document_book.pdf (Accessed on 02/01/2026)

¹⁵ *Ibid*

2.0 Renewable Energy in the African Context: Opportunities and Challenges

Africa has an immense renewable energy potential with wind, solar, hydro, bioenergy, ocean tidal waves, geothermal among other renewables being abundant throughout the continent¹⁶. It has been observed that Africa experiences abundant sunlight and strong winds for most parts of the year creating suitable conditions for harnessing renewable sources of energy including solar and wind energy¹⁷. In addition, Africa has viable deposits of critical raw materials including cobalt, bauxite, copper, nickel, manganese, graphite, lithium, chromium and rare earth elements¹⁸. These materials are at the heart of the energy transition since they are essential components in many of today's rapidly growing clean energy technologies including wind turbines, solar panels and electric vehicles¹⁹.

The abundance of renewable sources of energy provides immense opportunities to unlock Sustainable Development in Africa. For example, adopting renewable sources of energy including wind, solar, hydro and geothermal resources is key towards tackling energy poverty in Africa²⁰. Access to energy remains a key challenge in Africa with millions of people lacking reliable, affordable, sustainable and modern energy services²¹. It is estimated that nearly 600 million

¹⁶ Ibid

¹⁷ AUDA-NEPAD., 'Empowering Africa: Enhancing Access To Electricity Through Renewable Energy' Available at <https://www.nepad.org/blog/empowering-africa-enhancing-access-electricity-through-renewable-energy> (Accessed on 03/01/2026)

¹⁸ Mo Ibrahim Foundation., 'Africa's Critical Minerals: Africa at the Heart of a Low-Carbon Future' Available at <https://mo.ibrahim.foundation/sites/default/files/2022-11/minerals-resource-governance.pdf> (Accessed on 03/01/2026)

¹⁹ United Nations Environment Programme., 'Critical Energy Transition Minerals' Available at <https://www.unep.org/topics/energy/renewable-energy/critical-energy-transition-minerals> (Accessed on 03/01/2025)

²⁰ Africa Policy Research Institute., 'Energising Africa: enabling private sector development in renewable energy' Available at <https://afripoli.org/energising-africa-enabling-private-sector-development-in-renewable-energy> (Accessed on 03/01/2026)

²¹ United Nations Sustainable Development Group., 'Decoding Africa's Energy Journey: Three Key Numbers' Available at <https://unsdg.un.org/latest/stories/decoding-africa%E2%80%99s-energy-journey-three-key->

people in Africa lack access to electricity²². The International Energy Agency (IEA) observes that enhancing access to energy is a crucial goal for Africa, where nearly 600 million people live without electricity and roughly 1 billion people lack access to clean cooking sources²³. Adopting renewable energy, which is abundant all over Africa, is therefore a pertinent agenda towards tackling energy poverty for a sustainable future.

In addition to fostering access to energy for the citizens of Africa, renewable energy provides many other benefits for people and planet. For example, renewable energy can enable Africa to achieve a just energy transition. Energy transition involves shifting the global, regional and national energy sectors from fossil fuel- based systems of energy production and consumption including oil, natural gas and coal to renewable energy sources like wind and solar²⁴. This concept envisages the shift from an energy mix based on fossil fuels to one that produces very limited, if not zero, carbon emissions, based on green and clean sources of energy such as renewable energy sources²⁵. It has been observed that energy transition presents a unique opportunity to address key global challenges including climate change, energy access disparities, poverty, inequality, and health impacts of the energy sector therefore laying the foundation for a sustainable, inclusive and more resilient future²⁶. In particular, energy transition

[numbers#:~:text=600%20million%20Africans%20without%20access,access%2C%20according%20to%202022%20data.](#) (Accessed on 03/01/2026)

²² Africa Policy Research Institute., 'Energising Africa: enabling private sector development in renewable energy' Op Cit

²³ International Energy Agency., 'World Energy Investments 2024: Africa' Available at <https://www.iea.org/reports/world-energy-investment-2024/africa> (Accessed 03/01/2026)

²⁴ S & P Global., 'What is Energy Transition?' Available at <https://www.spglobal.com/en/researchinsights/articles/what-is-energy-transition> (Accessed on 03/01/2026)

²⁵ The energy transition., Available at <https://www.enelgreenpower.com/learning-hub/energy-transition> (Accessed on 03/01/2026)

²⁶ United Nations Development Programme., 'What is the sustainable energy transition and why is it key to tackling climate change?' Available at <https://climatepromise.undp.org/news-and-stories/what-sustainable-energy-transition-and-why-it-key-tackling-climate-change> (Accessed on 03/01/2026)

is key in tackling climate change since fossil fuels are the main source of greenhouse gas emissions responsible for the climate crisis²⁷. With Africa facing disproportionate impacts from climate change, achieving energy transition is vital in protecting people and planet²⁸. Renewable energy thus provides opportunities towards achieving a just transition to clean energy in Africa for a sustainable future²⁹.

Renewable energy can also enable Africa to move towards clean air. For example, it has been observed that a majority of Africa's population relies on traditional biomass for preparing food³⁰. Bio-energy sources such as charcoal, wood fuel and dung are the most common source of energy for cooking in Africa especially among the rural population³¹. Use of such sources of energy for cooking is linked to more than 500,000 annual deaths globally due to indoor pollution³². It has been observed that air quality is closely linked to the earth's climate and ecosystems globally³³. For instance, many of the drivers of air pollution including combustion

²⁷ Ibid

²⁸ AUDA-NEPAD., 'Empowering Africa: Enhancing Access To Electricity Through Renewable Energy' Op Cit

²⁹ Ibid

³⁰ United Nations., 'Advancing SDG 7 in Africa.' Available at <https://sdgs.un.org/sites/default/files/2023-06/2023%20Advancing%20SDG7%20in%20the%20Africa-062923.pdf> (Accessed on 03/01/2026)

³¹ Muchiri. L., 'Gender and Equity in Bioenergy Access and Delivery in Kenya' Practical Action East Africa, 2008, available at https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=2ahUKEwiy2P29z6PnAhUEiFwKHQlyCLOQFjAAegQIBRAB&url=http%3A%2F%2Fwww.ca.s.ed.ac.uk%2F_d_ata%2Fassets%2Fword_doc%2F0007%2F24793%2FGender_and_Equity_in_Bio_energy_Access_and_Delivery_in_Kenya_final.doc&usg=AOvVaw2AKp1mvTSC9tafIKJ-36 (Accessed on 03/01/2026)

³² United Nations., 'Advancing SDG 7 in Africa.' Op Cit

³³ World Health Organization., 'Air Pollution' Available at https://www.who.int/health-topics/air-pollution#tab=tab_1 (Accessed on 03/01/2026)

of fossil fuels are also sources of greenhouse gas emissions³⁴. As a result, switching to clean sources of energy, such as wind and solar not only helps in tackling climate change but also in abating air pollution for good human health and well-being³⁵. Adopting renewable energy in Africa therefore provides a win-win outcome that strengthens climate action while also fostering clean air for human health and well-being³⁶.

In addition, renewable energy is key towards achieving One Health for people and planet in Africa. One Health is an integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems³⁷. This approach recognizes that the health of humans, domestic and wild animals, plants, and the wider environment (including ecosystems) are closely linked and interdependent³⁸. The concept of One Health aims to achieve optimal health outcomes recognizing the interconnection between people, animals, plants, and their shared environment³⁹. Embracing renewable sources of energy in Africa can aid in moving towards One Health. For example, by combating air pollution and climate change, renewable energy improves human, animal and ecosystem health⁴⁰. Renewable energy can also power healthcare systems towards

³⁴ Ibid

³⁵ United Nations., 'Renewable Energy - Powering a Safer Future' Available at <https://www.un.org/en/climatechange/raising-ambition/renewable-energy> (Accessed on 03/01/2026)

³⁶ Ibid

³⁷ World Health Organization., 'One Health' Available at https://www.who.int/health-topics/one-health#tab=tab_1 (Accessed on 03/01/2026)

³⁸ Adisasmito. W., 'One Health: A New Definition for a Sustainable and Healthy Future' Available at <https://pmc.ncbi.nlm.nih.gov/articles/PMC9223325/#:~:text=The%20approach%20mobilizes%20multiple%20sectors,climate%20change%20and%20contributing%20to> (Accessed on 03/01/2026)

³⁹ About One Health., Available at <https://www.cdc.gov/one-health/about/index.html#:~:text=One%20Health%20is%20a%20collaborative,plants%20C%20and%20their%20shared%20environment> (Accessed on 03/01/2026)

⁴⁰ Sustainable Development Goals and One Health: SDG 7., Available at <https://blogs.ifas.ufl.edu/onehealth/2022/11/17/clean-energy-and-one->

improving overall health outcomes for both people and planet for One Health⁴¹.

Adopting renewable energy can also accelerate progress towards a net zero future in Africa. The ideal of net zero is achieved when anthropogenic carbon dioxide emissions are balanced globally by anthropogenic carbon dioxide removals over a specified period⁴². Achieving net zero emissions requires striking a balance between the amounts of emissions put into the atmosphere with the amount taken out⁴³. It has been observed that generating renewable energy creates lower emissions than burning fossil fuels⁴⁴. Renewable energy is therefore key in moving towards net zero due to their potential to significantly reduce greenhouse gas emissions driving climate change⁴⁵. According to IEA, achieving the ideal of net zero emissions by 2050 requires significant investments in clean sources of energy including renewable energy⁴⁶.

From the foregoing, it is evident that renewable energy is crucial in the quest towards a sustainable future for Africa. However, despite endowed with renewable sources of energy including wind, solar and geothermal resources, their adoption has been very low in Africa. It is estimated that only 2 percent of global renewable energy investments have been made in Africa in the last two decades⁴⁷. Inadequate investments in renewable energy, insufficient regulatory and policy environments and lack of adequate infrastructure and financing are

[health/#:~:text=Hence%2C%20access%20to%20clean%20energy,is%20a%20very%20concerning%20estimate](#). (Accessed on 03/01/2026)

⁴¹ Ibid

⁴² Intergovernmental Panel on Climate Change., 'Glossary' Available at https://www.ipcc.ch/site/assets/uploads/sites/2/2022/06/SR15_AnnexI.pdf (Accessed on 03/01/2026)

⁴³ United Nations Climate Change., 'Get Net Zero Right' Available at <https://racezero.unfccc.int/wp-content/uploads/2021/07/Get-Net-Zero-right-2.pdf> (Accessed on 03/01/2026)

⁴⁴ United Nations., 'What is Renewable Energy?' Op Cit

⁴⁵ International Energy Agency., 'Net Zero by 2050' Available at <https://www.iea.org/reports/net-zero-by-2050> (Accessed on 03/01/2026)

⁴⁶ Ibid

⁴⁷ Africa Policy Research Institute., 'Energising Africa: enabling private sector development in renewable energy' Op Cit

some of the barriers undermining the adoption of renewable energy in Africa⁴⁸. It is imperative to address these challenges in order to move towards just transition, clean air, One Health and net zero in Africa through renewable energy.

3.0 Adopting Renewable Energy in Africa for a Sustainable Future

Harnessing Africa's immense renewable energy potential is vital in ensuring a sustainable future for people and planet in the continent. Renewable sources of energy provide numerous benefits and enhance progress towards energy transition, clean air, One Health and net zero. By adopting renewable sources of energy including wind, solar, geothermal and hydro energy, African nations can diversify their energy mix, reduce dependence on polluting fossil fuels, and enhance energy security⁴⁹. Further, the shift to renewable energy can unlock new opportunities for investment, innovation, and job creation, driving economic growth across key sectors such as agriculture, healthcare and education⁵⁰.

In order to ensure a sustainable future for people and planet in Africa, it is necessary to enhance investments in clean energy sources such as solar, wind and geothermal energy that are abundant all over the continent⁵¹. African countries have been urged to create suitable legal and regulatory frameworks, harness both public and private investments and upgrade infrastructure and technology in order to adopt renewable energy in the continent⁵². Further, it is imperative to sustainably harness critical raw materials in Africa. These materials including copper, manganese, cobalt, nickel, graphite, lithium, chromium and bauxite can enhance the adoption of renewable energy in Africa by supporting clean energy

⁴⁸ African Development Bank Group., 'Light Up and Power Africa – A New Deal on Energy for Africa' Available at <https://www.afdb.org/en/the-high-5/light-up-and-power-africa-%E2%80%93-a-new-deal-on-energy-for-africa> (Accessed on 03/01/2026)

⁴⁹ Global Energy Alliance., 'Africa's Steady Race Towards Renewable Energy Sources' Available at <https://energyalliance.org/africas-steady-race-towards-renewable-energy-sources/> (Accessed on 03/01/2026)

⁵⁰ Ibid

⁵¹ United Nations., 'Affordable and Clean Energy' Available at <https://www.un.org/sustainabledevelopment/energy/> (Accessed on 03/01/2026)

⁵² AUDA-NEPAD., 'Empowering Africa: Enhancing Access To Electricity Through Renewable Energy' Op Cit

technologies including solar panels, wind turbines, electric vehicles and electricity transmission networks⁵³. It is therefore vital to ensure the sustainable extraction and use of critical raw materials by prioritising human rights, environmental conservation and equitable benefit-sharing arrangements for a just energy transition⁵⁴.

In addition, it is imperative to prioritise the needs of vulnerable populations in order to achieve a just and equitable energy transition in Africa. For example, it has been observed that clearing land to support renewable energy developments such as wind and geothermal projects can impact wildlife, biodiversity and ecosystems with adverse effects on indigenous peoples and local communities⁵⁵. Further, wind and solar farms, hydroelectric dams, and geothermal plants needed to adopt renewable energy all require significant land and water resources, often leading to disputes with indigenous and vulnerable communities over land rights and environmental impacts⁵⁶. The adoption of renewable energy in Africa has often come at the expense of human rights due to loss of land, livelihoods and other rights of indigenous peoples including the right to a clean, healthy and sustainable environment⁵⁷. It is therefore vital to ensure that the adoption of renewable energy in Africa is inclusive and prioritises the needs of the vulnerable including through safeguarding the land and environmental rights of indigenous peoples and local communities⁵⁸.

⁵³ United Nations Environment Programme., 'Critical Energy Transition Minerals' Op Cit

⁵⁴ International Energy Agency., 'Critical Minerals' Available at <https://www.iea.org/topics/critical-minerals> (Accessed on 03/01/2026)

⁵⁵ Environmental Impacts of Renewable Energy Sources., Available at <https://www.adecseg.com/resources/blog/environmental-impacts-of-renewable-energy-sources/> (Accessed on 03/01/2026)

⁵⁶ The Role of Fossil Fuel and Renewable Energy Projects in Conflict Across Africa., Available at <https://www.accord.org.za/analysis/the-role-of-fossil-fuel-and-renewable-energy-projects-in-conflict-across-africa/> (Accessed on 03/01/2026)

⁵⁷ Impact of renewable energy projects on Indigenous communities in Kenya., Available at <https://iwgia.org/en/kenya/3534-impact-of-renewable-energy-projects-on-indigenous-communities-in-kenya.html#:~:text=Kenya's%20ambitious%20plan%20to%20transition,energy%20by%20this%20year%2C%202020>. (Accessed on 03/01/2026)

⁵⁸ Ibid

Through the foregoing, it is possible to harness Africa's immense renewable energy potential for a sustainable future.

4.0 Conclusion

Adopting renewable energy is a key agenda in ensuring a sustainable future for people and planet in Africa. The continent has abundant sources of renewable energy including wind, solar, geothermal, hydro, bioenergy, ocean and tidal energy⁵⁹. Harnessing these sources of energy provides immense opportunities to foster Sustainable Development in Africa including through achieving environmental sustainability by confronting climate change and air pollution and promoting energy security, job creation and socio-economic development⁶⁰. Embracing renewable energy is necessary in order to move towards just transition, clean air, One Health and net zero for a sustainable future for people and planet in Africa.

⁵⁹ Africa Union., 'Agenda 2063: The Africa we Want.' Op Cit

⁶⁰ AUDA-NEPAD., 'Empowering Africa: Enhancing Access To Electricity Through Renewable Energy' Op Cit

References

About One Health., Available at <https://www.cdc.gov/one-health/about/index.html#:~:text=One%20Health%20is%20a%20collaborative,plants%20C%20and%20their%20shared%20environment>

Adisasmito. W., 'One Health: A New Definition for a Sustainable and Healthy Future' Available at <https://pmc.ncbi.nlm.nih.gov/articles/PMC9223325/#:~:text=The%20approach%20mobilizes%20multiple%20sectors,climate%20change%20and%20contributing%20to>

Africa Policy Research Institute., 'Energising Africa: enabling private sector development in renewable energy' Available at <https://afripoli.org/energising-africa-enabling-private-sector-development-in-renewable-energy>

Africa Union., 'Agenda 2063: The Africa we Want.' Available at https://au.int/sites/default/files/documents/33126-doc-framework_document_book.pdf

African Development Bank Group., 'Light Up and Power Africa – A New Deal on Energy for Africa' Available at <https://www.afdb.org/en/the-high-5/light-up-and-power-africa-%E2%80%93-a-new-deal-on-energy-for-africa>

AUDA-NEPAD., 'Empowering Africa: Enhancing Access To Electricity Through Renewable Energy' Available at <https://www.nepad.org/blog/empowering-africa-enhancing-access-electricity-through-renewable-energy>

Energy Act, No. 1 of 2019, Government Printer, Nairobi

Environmental Impacts of Renewable Energy Sources., Available at <https://www.adecesg.com/resources/blog/environmental-impacts-of-renewable-energy-sources/>

Global Energy Alliance., 'Africa's Steady Race Towards Renewable Energy Sources' Available at <https://energyalliance.org/africas-steady-race-towards-renewable-energy-sources/>

Impact of renewable energy projects on Indigenous communities in Kenya., Available at <https://iwgia.org/en/kenya/3534-impact-of-renewable-energy-projects-on->

[indigenous-communities-in-](#)

[kenya.html#:~:text=Kenya's%20ambitious%20plan%20to%20transition,energy%20by%20this%20year%2C%202020](#)

Intergovernmental Panel on Climate Change., 'Glossary' Available at https://www.ipcc.ch/site/assets/uploads/sites/2/2022/06/SR15_AnnexI.pdf

International Energy Agency., 'Critical Minerals' Available at <https://www.iea.org/topics/critical-minerals>

International Energy Agency., 'Net Zero by 2050' Available at <https://www.iea.org/reports/net-zero-by-2050>

International Energy Agency., 'Renewables' Available at <https://www.iea.org/energy-system/renewables>

International Energy Agency., 'World Energy Investments 2024: Africa' Available at <https://www.iea.org/reports/world-energy-investment-2024/africa>

Mo Ibrahim Foundation., 'Africa's Critical Minerals: Africa at the Heart of a Low-Carbon Future' Available at <https://mo.ibrahim.foundation/sites/default/files/2022-11/minerals-resource-governance.pdf>

Muchiri. L., 'Gender and Equity in Bioenergy Access and Delivery in Kenya' Practical Action East Africa, 2008, available at https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=2ahUKEwiY2P29z6PnAhUEiFwKHQlyCLOQFjAAegQIBRAB&url=http%3A%2F%2Fwww.cas.ed.ac.uk%2F_d ata%2Fassets%2Fword_doc%2F0007%2F24793%2FGender_and_Equity_in_Bio_energy_Access_and_Delivery_in_Kenya_final.doc&usg=AOvVaw2AKp1mvTSC9tafkIKJ-36

S & P Global., 'What is Energy Transition?' Available at <https://www.spglobal.com/en/researchinsights/articles/what-is-energy-transition>

Solomon. B., & Krishna. K., 'The Coming Sustainable Energy Transition: History, Strategies, and Outlook.' *Energy Policy* 39 (2011) 7422-7431

Sustainable Development Goals and One Health: SDG 7., Available at <https://blogs.ifas.ufl.edu/onehealth/2022/11/17/clean-energy-and-one-health/#:~:text=Hence%2C%20access%20to%20clean%20energy,is%20a%20very%20concerning%20estimate>

The energy transition., Available at <https://www.enelgreenpower.com/learning-hub/energy-transition>

The Role of Fossil Fuel and Renewable Energy Projects in Conflict Across Africa., Available at <https://www.accord.org.za/analysis/the-role-of-fossil-fuel-and-renewable-energy-projects-in-conflict-across-africa/>

United Nations Climate Change., 'Get Net Zero Right' Available at <https://racetozero.unfccc.int/wp-content/uploads/2021/07/Get-Net-Zero-right-2.pdf>

United Nations Development Programme., 'What is the sustainable energy transition and why is it key to tackling climate change?' Available at <https://climatepromise.undp.org/news-and-stories/what-sustainable-energy-transition-and-why-it-key-tackling-climate-change>

United Nations Environment Programme., 'Critical Energy Transition Minerals' Available at <https://www.unep.org/topics/energy/renewable-energy/critical-energy-transition-minerals>

United Nations General Assembly., 'Transforming Our World: the 2030 Agenda for Sustainable Development.' 21 October 2015, A/RES/70/1., Available at <https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf>

United Nations Sustainable Development Group., 'Decoding Africa's Energy Journey: Three Key Numbers' Available at <https://unsdg.un.org/latest/stories/decoding-africa%E2%80%99s-energy-journey-three-key-numbers#:~:text=600%20million%20Africans%20without%20access,access%2C%20access%20to%202022%20data>

United Nations., 'Advancing SDG 7 in Africa.' Available at <https://sdgs.un.org/sites/default/files/2023-06/2023%20Advancing%20SDG7%20in%20the%20Africa-062923.pdf>

United Nations., 'Affordable and Clean Energy' Available at <https://www.un.org/sustainabledevelopment/energy/>

United Nations., 'Climate Action.' Available at <https://www.un.org/en/climatechange/howcommunities-are-embracing-renewable-energy>

United Nations., 'Renewable Energy – Powering a Safer Future' Available at <https://www.un.org/en/climatechange/raising-ambition/renewable-energy>

United Nations., 'The Role of Fossil Fuels in a Sustainable Energy System' Available at <https://www.un.org/en/chronicle/article/role-fossil-fuels-sustainable-energy-system>

United Nations., 'What is Renewable Energy?' Available at <https://www.un.org/en/climatechange/what-is-renewable-energy>

What is Renewable Energy?., Available at <https://extension.psu.edu/what-is-renewable-energy>

World Health Organization., 'Air Pollution' Available at https://www.who.int/health-topics/air-pollution#tab=tab_1

World Health Organization., 'One Health' Available at https://www.who.int/health-topics/one-health#tab=tab_1

The Economics of Loss and Damage: Financing Climate Reparations in the Global South

By Joshua Kipyego Fwamba and Younggreen Peter Mudeyi**

Abstract

The 2025 *International Court of Justice Advisory Opinion* affirmed that States bear binding obligations under international law to protect the climate system for present and future generations and that such duty possess an erga omnes character. Building on this authoritative finding, this paper argues that existing mechanisms, such as the Loss and Damage Fund, represent a minimal and incomplete response to the historical responsibilities of high-emitting States. When viewed through the lens of international law on State responsibility and the economics of global justice, these obligations require not merely assistance but reparations which include restitution, compensation and satisfaction owed to developing States disproportionately harmed by anthropogenic climate change. Within the broader North-South resource relationship, climate reparations are inseparable from what scholars have termed environmental debt: the accumulated ecological deficit owed by industrialized States to the Global South. As Andrew Simms and other economists argue, citizens of the world possess an equal right to the global commons; the atmosphere, oceans and other shared resources. Those who have exceeded their equitable share of natural resources such as carbon consumption owe a debt to those who have consumed less, yet suffer more from climate impacts. This unacknowledged moral and ecological

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debt reframes the South's financial indebtedness, situating it within a structure of historical exploitation that has reversed the real flow of value. Accordingly, the paper contends that climate reparations should move beyond the voluntary logic of aid and toward enforceable financial justice grounded in international law, distributive fairness and the principles of prevention, cooperation and reparation. The ICJ's opinion provides the normative and legal foundation for operationalizing this transformation in global climate finance.

1.0. Introduction: Unveiling the Foundations of Climate Reparations

The advisory opinion delivered by the International Court of Justice on July 23, 2025, firmly establishes that states carry binding obligations under international law to prevent substantial harm to the climate system, extending these duties *erga omnes* to protect both current and future generations from the adverse effects of anthropogenic greenhouse gas emissions.¹ We view this decision as a critical juncture in global climate discourse, urging a fundamental shift in how the economics of loss and damage intersect with reparatory obligations toward the Global South, where high-emitting nations must finally reckon with their disproportionate role in fueling environmental devastation. Existing instruments, such as the Fund for Responding to Loss and Damage established at COP27,² expose glaring deficiencies, with initial pledges amounting to just \$749 million by late 2024 and disbursements lagging at \$69 million, insufficient against the backdrop of escalating disasters requiring trillions in support.³

¹ See *Obligations of States in Respect of Climate Change, Advisory Opinion*, 2025 I.C.J. Rep. 1, para. 440, where the Court stated that all States have a common interest in the protection of global environmental commons like the atmosphere and the high seas, and therefore, States' obligations pertaining to the protection of the climate system and other parts of the environment from anthropogenic GHG emissions, particularly the obligation to prevent significant transboundary harm under customary international law, are obligations *erga omnes*.

² Schalatek, Liane. Fund for Responding to Loss and Damage. (2025) <<https://climatefundsupdate.org/the-funds/fund-for-responding-to-loss-and-damage/>> accessed 10 December 2025.

³ Kaplan, Alexia. "Is the Loss and Damage Fund All That It Promises to Be? Examining Some of the Fund's Shortcomings and Putting Things into Perspective after COP 28." University of Bristol Law School Blog, (Mar. 2024) <<https://legalresearch.blogs.bris.ac.uk/2024/03/is-the-loss-and-damage-fund-all-that->

Through an examination of state responsibility principles outlined in the Articles on Responsibility of States for Internationally Wrongful Acts,⁴ we maintain that these duties compel reparations encompassing restitution for degraded ecosystems, compensation for quantifiable economic setbacks, and satisfaction for intangible cultural and social wounds inflicted on marginalized communities.

Anthropogenic climate change exacts a severe toll on developing states, evident in events like the submergence of low-lying atolls in the Pacific and recurrent crop failures across the Sahel, where these regions face existential threats despite emitting a fraction of global greenhouse gases over time.⁵ We dissect the roots of this imbalance, tracing how industrialization propelled by developed nations from the 1850s onward generated cumulative CO₂ emissions,⁶ with the United States responsible for roughly 25%⁷ and the European Union 22% of historical totals up to 2023,⁸ perpetuating a cycle of vulnerability for those least culpable.

[it-promises-to-be-examining-some-of-the-funds-shortcomings-and-putting-things-into-perspective-after-cop-28/](#) > accessed 10 December 2025.

⁴ See International Law Commission, “Draft Articles on Responsibility of States for Internationally Wrongful Acts,” Report of the International Law Commission on the Work of Its Fifty-Third Session, UN GAOR, 56th Sess., Supp. No. 10, UN Doc. A/56/10, 2001 (‘ARSIWA’). The key principles of state responsibility established in the ARSIWA regarding historical emissions as continuing breaches and the obligation for reparations, include the following: Every internationally wrongful act of a State entails its international responsibility (art 1); Existence and timing of a breach of an international obligation, including breaches of a continuing character (arts 12-15, especially art 14); Legal consequences, including full reparation (art 31), and forms of reparation comprising restitution (art 35), compensation (art 36), and satisfaction (art 37); and (4) Invocation of responsibility where several States are injured by the same internationally wrongful act (art 47).

⁵ Rosanne Martyr-Koller and others, ‘Loss and Damage Implications of Sea-Level Rise on Small Island Developing States’ (2021) *Current Opinion in Environmental Sustainability* 245, 259.

⁶ Williams, Jeremy. “Why Climate Change Is Inherently Racist.” BBC Future (2022) < www.bbc.com/future/article/20220125-why-climate-change-is-inherently-racist > accessed 11 December 2025.

⁷ Ritchie, Hannah, and Max Roser. “United States: CO₂ Country Profile.” Our World in Data, Oxford University (2025) < <https://ourworldindata.org/co2-emissions> > accessed 11 December 2025.

⁸ Daniel Hernández and Hannah Ritchie, ‘Which Countries Have Contributed the Most

This dynamic evokes the image of an upstream industrialist fouling a communal waterway, where the contamination inevitably burdens downstream inhabitants with cleanup costs and lost livelihoods, demanding mechanisms that enforce upstream accountability. By invoking intertemporal legal principles, we advance the notion that historical emissions qualify as ongoing breaches under customary international law, allowing contemporary claims to bridge past actions with present reparative needs.

Colonial histories intensify this ecological rift, as unchecked extraction of minerals, timber, and labour from vast territories in Africa, Asia, and Latin America eroded indigenous stewardship of shared resources, funnelling prosperity northward while embedding structural poverty and environmental fragility in the South.⁹ We challenge voluntary aid models that echo these patterns, imposing loans with stringent conditions that often amplify debt burdens and undermine self-determined resilience strategies, as seen in post-disaster financing schemes. Mandatory frameworks, anchored in distributive equity and the polluter pays doctrine, offer a corrective path, obliging over consumers of atmospheric space to restore balance through binding transfers that honour equal entitlements to planetary commons. This approach integrates prevention and international cooperation, mandating proactive steps to halt further degradation while fostering collaborative governance.

Quantifying this debt illuminates its magnitude, with analyses projecting the Global North's liability at up to \$192 trillion when factoring social costs of carbon at \$50 to \$100 per ton, translating to minimum annual obligations of \$500-600

to Historical CO₂ Emissions?' (Our World in Data, 2025) <
<https://ourworldindata.org/data-insights/which-countries-have-contributed-the-most-to-historical-co-emissions#:~:text=March%2016%2C%202025-Which%20countries%20have%20contributed%20the%20most%20to%20historical%20CO%E2%82%82%20emissions,followed%20by%20China%20and%20Russia.> > accessed 26 December 2025.

⁹ Iva Peša, 'Toxic Coloniality and the Legacies of Resource Extraction in Africa' (2023) 9(2) *International Review of Environmental History* 33, 50.

billion from developed emitters.¹⁰ We recommend evaluation protocols leveraging IPCC AR6 datasets and EDGAR inventories, incorporating weights for historical emissions, gross domestic product per capita, and vulnerability metrics like the V20 index to direct funds equitably.¹¹ In line with common but differentiated responsibilities, entrenched emitters such as the United States ought to bear heavier loads than transitional economies, ensuring allocations favour least developed countries and small island states. This framework rebuts concerns over causal attribution by adopting ICJ-endorsed probabilistic approaches,¹² facilitating comprehensive coverage for mitigation efforts, adaptive infrastructure, and compensation for irreversible impacts.

The Loss and Damage Fund epitomises institutional flaws, where voluntary commitments have yielded pledges dwarfed by actual requirements amid surging crises, as evidenced by Global South delegations at COP29 pushing for \$1.3 trillion yearly but settling for a phased \$300 billion by 2035, perpetuating asymmetrical negotiations.¹³ We scrutinise this shortfall as a barrier to equity, calling for autonomous oversight that prioritises grants to evade debt spirals and empowers affected states in resource distribution. Our examination highlights how such systems sustain historical power imbalances, emphasising the urgency of reforms that lift human rights into accountability measures for state infractions.¹⁴ This inquiry carries great significance by centering perspectives

¹⁰ Andrew L Fanning and Jason Hickel, 'Compensation for Atmospheric Appropriation' (2023) 6 *Nature Sustainability* 1077.

¹¹ New Climate Institute. The Challenges of Assessing "Collective Progress": Design Options for an Effective Global Stocktake Process Under the UNFCCC. Climate Change 28/2021 (29 Apr. 2021) < <https://newclimate.org/resources/publications/the-challenges-of-assessing-collective-progress-design-options-for-an> > accessed 11 December 2025.

¹² Obligations of States in Respect of Climate Change (n 1) *supra* at paras. 275, 283, 293.

¹³ UNFCCC, 'COP29 UN Climate Conference Agrees to Triple Finance to Developing Countries, Protecting Lives and Livelihoods' (UNFCCC News, 24 November 2024) < <https://unfccc.int/news/cop29-un-climate-conference-agrees-to-triple-finance-to-developing-countries-protecting-lives-and> > accessed 12 December 2025.

¹⁴ Natalia Alayza and Gaia Larsen, 'How to Reach \$300 Billion — and the Full \$1.3 Trillion — Under the New Climate Finance Goal' (WRI Insights, 20 February 2025) <

from exploited regions, dismantling charitable facades, and paving routes to enforceable equity in an age of intensifying climatic perils. Our main argument is that developed countries should pay reparations of up to \$192 trillion, given out annually at a minimum of \$500-600 billion, in order to achieve true fairness. The Loss and Damage Fund should be seen as a required payment, based on international law, rather than voluntary aid. This obligation is like paying an ancestral debt: the Global North, which has benefited from resource extraction, must make up for the harm it caused, leaving the Global South with eroded lands and uncertain futures. This is a moral and legal responsibility.

In this paper, we begin by looking at the history behind the climate crisis, explaining how industrialization has harmed the Global South and how we can calculate the debt for past emissions. We then examine the International Court of Justice's (ICJ) advisory opinion, focusing on the duties it outlines, while pointing out the missing details about past responsibilities. We propose using state responsibility rules to enforce these duties retroactively. Next, we look at how colonialism still affects climate policy, reviewing the reactions of African and developing countries at recent COP meetings and arguing for fairer distributions of climate finance. Finally, we suggest ways to improve the current financial systems, adapting the "polluter pays" principle, addressing the limitations of current funds, and proposing strong plans for making these ideas work. Ultimately, we bring these ideas together to push for fairer policies and a more unified global future.

2.0. Chains of the Past: Forging Accountability in Climate History

The Industrial Revolution, which began in the mid-19th century across Europe and North America, transformed economies through coal-powered machinery and marked the onset of a new era.¹⁵ This period did more than accelerate

<https://www.wri.org/insights/ncqg-climate-finance-goals-explained?campaign=752614> > accessed 26 December 2025.

¹⁵ Sumudu Atapattu and Carmen G Gonzalez, 'TWAAIL, Climate Change and the North-South Divide' in Antony Anghie and others (eds), *The TWAAIL Handbook* (Edward Elgar forthcoming 2025) 2.

economic dominance; it also entrenched a fossil fuel system tightly linked to colonial exploitation, setting the stage for the climate disruptions we face today.¹⁶ This phase marked the inception of what we now recognize as carbon capitalism.¹⁷ Northern powers extracted vast resources including gold, silver, cotton, and timber from colonised territories, exploiting labour and ecosystems to fuel their industrial growth. This process reversed value flows, taking wealth from the Global South and enriching the North, while leaving Southern ecosystems vulnerable to exploitation. The consequences were profound, as this exploitation was framed within the context of racial hierarchies that justified violence against black, brown and indigenous populations,¹⁸ enabling the expansion of extractive industries and resource wars. Industrial disasters like the 1952 London Fog, which killed thousands, reflect the global nature of pollution.¹⁹ This exported pollution caused acid rain in Asia and soil erosion in India, where timber extraction led to desertification and famines, amplifying the region's vulnerability to trade imbalances.²⁰ As early industrialisers, the United States and Europe bear responsibility of historical emissions, which compels them to address these continuing breaches under evolving customary international law. Colonialism played a critical role in shaping a worldview that treated nature as a resource to be conquered and exploited, separate from human society.²¹ This

¹⁶ Antony Anghie, *Imperialism, Sovereignty and the Making of International Law* (CUP 2005) 96, 108, 117.

¹⁷ See Tim Di Muzio, *Carbon Capitalism: Energy, Social Reproduction and World Order* (Rowman & Littlefield International 2015) 8 who defines carbon capitalism as the concept that the scale and global expansion of capital accumulation, along with energy-intensive forms of social reproduction, would not have been possible without the presence of abundant, affordable, and accessible fossil fuels.

¹⁸ See Anghie (n 16) 101-107; Usha Natarajan and Kishan Khoday, 'Locating Nature: Making and Unmaking International Law' (2014) 27 *Leiden Journal of International Law* 573, 587.

¹⁹ Julia Martinez, 'Great Smog of London | 1952, Cause, Deaths, & Facts' (Britannica, 2025) < <https://www.britannica.com/event/Great-Smog-of-London> > accessed 26 December 2025.

²⁰ Lei Duan and others, 'Acid Deposition in Asia: Emissions, Deposition, and Ecosystem Effects' (2016) 146 *Atmospheric Environment* 55-69.

²¹ Maxine Burkett, 'Root and Branch: Climate Catastrophe, Racial Crises, and the History and Future of Climate Justice' (2021) 134(6) *Harvard Law Review Forum* 327-329.

worldview not only justified the large-scale extraction of resources²² but has also contributed to climate-amplified disasters, such as sea-level rise threatening small island nations. The Eurocentric myth of nature as something to be dominated intensified global hierarchies, enabling the exploitation of subaltern peoples²³ and the appropriation of their lands for fossil fuel expansion.²⁴ The impacts of fossil fuels' lifecycle from extraction to combustion continue to exacerbate the vulnerabilities of the Global South. Resource conflicts, such as those connecting slavery to carbon economies,²⁵ underline how extraction has fuelled both economic exploitation and ecological degradation.²⁶ The disproportionate impacts of climate change are evident in events like Pakistan's 2022 floods, which displaced 33 million people,²⁷ and Ethiopia's 2023 drought, which contributed to famine.²⁸ These catastrophic events can be directly traced to the emissions of industrialized nations, who are now obligated to shoulder reparative burdens. The historical connection between industrialisation and colonial wealth must be acknowledged, as the South, which contributed minimally to the emissions, bears the brunt of climate impacts. This historical chain of exploitation reveals an ongoing obligation for reparations, as pre-1992

²² Natarajan and Khoday (n 18) 576.

²³ Ama Ruth Francis, 'Global Southerners in the North' (2021) 93 *Temple Law Review* 689, 706–708; Gayatri Chakravorty Spivak, 'Can the Subaltern Speak?' in Rosalind C Morris (ed), *Can the Subaltern Speak?: Reflections on the History of an Idea* (Columbia UP 2010) 21, 47–48.

²⁴ Randy Goldson, 'In Between the Global North-South Divide: Reassessing Climate Reparations as a State-to-State Transaction' (2024) 38(1) *Temple International and Comparative Law Journal* 147.

²⁵ *ibid*, 127.

²⁶ Jeremy Williams, 'Why Climate Change Is Inherently Racist' (BBC Future, 26 January 2022) < <https://www.bbc.com/future/article/20220125-why-climate-change-is-inherently-racist> > accessed 26 December 2025.

²⁷ World Bank, 'Pakistan: Flood Damages and Economic Losses Over USD 30 Billion and Reconstruction Needs Over USD 16 Billion – New Assessment' (Press Release, 28 October 2022) < <https://www.worldbank.org/en/news/press-release/2022/10/28/pakistan-flood-damages-and-economic-losses-over-usd-30-billion-and-reconstruction-needs-over-usd-16-billion-new-assessme> > accessed 14 December 2025.

²⁸ UNICEF, 'Ethiopia Humanitarian Situation Report, 01 November–31 December 2023' (10 January 2024) < <https://reliefweb.int/report/ethiopia/unicef-ethiopia-humanitarian-situation-report-no-12-january-december-2023> > accessed 26 December 2025.

emissions should be treated as continuing violations of international law.

The 1972 Stockholm Conference marked a turning point in environmental law,²⁹ crystallising the tensions between the Global North and South. Southern delegations challenged the prevailing Northern narratives that ignored colonial histories and questioned the responsibility of high-emitting countries.³⁰ Indira Gandhi's speech at Stockholm exposed the inequities in the development-environment binary imposed by the North.³¹ Gandhi's critique of sustainability frameworks highlighted the inherent contradictions in the Global North's development model, which perpetuated underdevelopment without addressing the exploitation of the Global South.³² Stockholm highlighted the vulnerability of low-lying coastal areas, the inequities in resource use, and the responsibility of Northern industrialisation for creating ecological deficits.³³ This moment marked a shift in the Southern perspective, which began to integrate justice with ecological priorities, rejecting the compartmentalization of nature that enabled colonial exploitation.³⁴ Gandhi's address revealed the limits of international environmental law and opened the door for future critiques of structural inequities.

Subsequent UNFCCC negotiations entrenched the North-South divide, where the framework of common but differentiated responsibilities (CBDR) recognized emissions disparities but continued to favour Northern interests.³⁵ The negotiations have often resulted in compromises that fail to address the systemic injustices of historical emissions. For example, at COP 27 developing-country

²⁹ Ved Nanda, 'Global Climate Change and International Law and Institutions' in Ved Nanda (ed), *World Climate Change: The Role of International Law & Institutions* (1983) 227, 229–234.

³⁰ *ibid.*

³¹ Malavika Rao, 'A TWAIL Perspective on Loss and Damage from Climate Change: Reflections from Indira Gandhi's Speech at Stockholm' (2022) 12 *Asian Journal of International Law* 66, 71–75.

³² *ibid.*, 67.

³³ *ibid.*, 79.

³⁴ *ibid.*, 80.

³⁵ Benito Müller, Niklas Höhne and Christian Ellermann, 'Differentiating (Historic) Responsibilities for Climate Change' (2009) 9(6) *Climate Policy* 593.

Parties called for significantly higher climate finance, on the order of the hundreds of billions of dollars annually while developed countries reaffirmed the earlier pledge of USD 100 billion per year (for the period through 2025) under United Nations Framework Convention on Climate Change (UNFCCC).³⁶ The allocation of these funds has primarily focused on loans rather than grants, perpetuating a neocolonial system that deepens debt rather than fostering self-determined resilience.³⁷ These financial structures continue to uphold colonial patterns, where the Global South is trapped in a cycle of debt. Despite recognising the historical responsibility of the Global North, these financial systems have failed to meet the needs of the South. The Paris Agreement further exemplifies the lack of meaningful action, as it fails to adequately address the pre-1992 emissions that created much of the current climate crisis.

The colonial origins of fossil capitalism have inflicted lasting harms on the Global South, from resource extraction to environmental degradation. The colonial origins of fossil-capitalism have inflicted lasting harms on the Global South, from resource extraction to environmental degradation and these harms are still felt today, for example in low-lying Pacific island states facing sea-level rise of the order of *at least* half a metre by 2100, a direct consequence of over-consumption by the Global North.³⁸ Fossil capitalism's lifecycle harms, including extraction, transportation, and combustion, have created an ecological debt that must be addressed under the principle of CBDR. The UK's coal boom (1850-1900)³⁹ and

³⁶ World Resources Institute, 'NCQG Deep Dive: How We Reach \$300 Billion — and the Full \$1.3 Trillion — Under the New Climate Finance Goal' (WRI Insights, 20 February 2025) < <https://www.wri.org/insights/ncqg-climate-finance-goals-explained> > accessed 12 December 2025.

³⁷ International Institute for Environment and Development, 'Grants for Developing Nations to Address Climate Change Outweighed Two to One by New Debt' (7 September 2023) < <https://www.iied.org/grants-for-developing-nations-address-climate-change-outweighed-two-one-new-debt> > accessed 12 December 2025.

³⁸ Charlotte Kate Weatherill, 'Sinking Paradise? Climate Change Vulnerability and Pacific Island Extinction Narratives' (2023) 145 *Geoforum* art 103566.

³⁹ Council on Foreign Relations, 'Timeline: Oil Dependence and U.S. Foreign Policy' (2025) < <https://www.cfr.org/timeline/oil-dependence-and-us-foreign-policy> > accessed 12 December 2025.

the US's rise to oil dominance (1900-1950)⁴⁰ are key periods where the highest emissions occurred, contributing significantly to the crisis we now face. Intertemporal law critiques the non-retroactivity of climate obligations, asserting that the emissions of the past must be treated as continuing breaches. This view holds that industrialising nations should be accountable for their past emissions, as they directly contributed to the crisis we face today.

Quantifying the ecological debt owed by high-emitting nations reveals the scale of reparations required. Estimates suggest the total debt amounts to \$192 trillion, with the US alone responsible for around \$30 trillion based on its excess emissions.⁴¹ The polluter-pays principle must be applied rigorously, with financial burdens proportional to the historical emissions of developed nations. These figures highlight the need for a robust reparations framework that holds industrialized nations accountable. The claims of shared benefits from industrialisation fail to address the net harm caused by the depletion of resources in the Global South.⁴² The protests at COP29, which demanded \$1.3 trillion annually in climate finance, highlight the persistent gap between the needs of the Global South and the inadequate commitments of the North.⁴³ The evolving climate discourse demands that the Global North acknowledge its historical responsibility and fulfil its reparative obligations. This historical trajectory culminates in the ICJ's 2025 advisory opinion, which affirms states' duties to protect the climate system as *erga omnes* obligations. We argue that while the opinion represents a step forward, it falls short of holding industrialised nations

⁴⁰ Hannah Ritchie and Max Roser, 'Coal power has effectively died in the United Kingdom: The Death of UK Coal in Five Charts' (Our World in Data, 28 January 2019) < <http://ourworldindata.org/data-insights/coal-power-has-effectively-died-in-the-united-kingdom> > accessed 13 December 2025.

⁴¹ Andrew L Fanning and Jason Hickel, 'Compensation for Atmospheric Appropriation' (2023) 6(9) *Nature Sustainability* 1077.

⁴² Center for Economic and Social Rights, Key Concepts: Climate Finance, Reparations, and Human Rights (10 November 2024) < <https://www.cesr.org/key-concepts-climate-finance-reparations-and-human-rights/> > accessed 13 December 2025.

⁴³ CHN Staff, 'COP29 Bulletin Day 9: Developing Nations Deride "\$200bn" Finance Rumour' (Climate Home News, 20 November 2024) < <https://www.climatechangenews.com/2024/11/20/cop29-bulletin-day-9-developing-nations-draw-super-red-line-on-climate-finance-goal/> > accessed 26 December 2025.

fully accountable for their past actions. The next section will explore the implications of the ICJ's opinion, critiquing its scope and suggesting ways to enforce reparations for past emissions. This burden of responsibility mirrors an inherited debt: the North, as heirs to exploitative colonial legacies, must now reconcile with the South's inheritance of environmental degradation and climate vulnerability.

3.0. Scales of Justice: Weighing the ICJ's Verdict on Climate Obligations

The 2025 advisory opinion of the International Court of Justice (ICJ) on states' obligations concerning climate change marks a pivotal development in international law, delineating binding duties under an expansive legal framework.⁴⁴ This judgment addresses the urgent need for transnational accountability while highlighting the complexities of implementing reparations amidst deeply entrenched historical inequities.⁴⁵ While the opinion strengthens the normative basis for climate justice, its limitations in addressing historical liabilities, particularly the colonial legacies traced in previous sections, hinder its full potential to ensure reparative efficacy. The ICJ's opinion draws upon multiple legal instruments, including the UN Charter, the UNFCCC, the Paris Agreement, UNCLOS, and customary law on harm prevention and cooperation. It enjoins states to take rigorous measures to mitigate anthropogenic greenhouse gas (GHG) emissions to prevent further damage to the climate system.⁴⁶ However, its reticence in addressing the full extent of historical liabilities⁴⁷ highlights the need for retroactive application of international law, specifically Articles 1, 14, and 47 of the Articles on Responsibility of States for Internationally Wrongful Acts (ARSIWA),⁴⁸ to recognize pre-industrial emissions as persistent violations that perpetuate the North-South divide.

⁴⁴ Obligations of States in Respect of Climate Change (n 1) *supra* at para. 457.

⁴⁵ See *ibid*, para. 74 where the court acknowledged that vulnerable communities that have historically contributed the least to climate change are the ones that suffer disproportionately: See also paras. 79, 80, 148-150, 179.

⁴⁶ *ibid*, paras. 273 & 274.

⁴⁷ *ibid*, para 423.

⁴⁸ World's Youth for Climate Justice, 'World's Youth for Climate Justice' (12 July 2025) <<https://www.wy4cj.org/>> accessed 14 December 2025.

The opinion's recognition of erga omnes obligations regarding climate protection represents a landmark assertion of state responsibility, emphasizing prevention, cooperation, and reparation under customary law and UNCLOS.⁴⁹ This comprehensive framework links state duties to human rights, stressing the responsibility of states to prevent the amplification of vulnerabilities caused by industrialisation. The opinion's focus on human rights emphasises that states must attribute emissions to state conduct and work toward ambitious reductions to avert further climate impacts, many of which disproportionately affect the Global South.⁵⁰ However, the opinion's failure to explicitly assign historical culpability to industrialized nations leaves unresolved issues of reparative justice. By subsuming Common But Differentiated Responsibilities and Equity (CBDR-RC) as supplementary considerations rather than independent imperatives, the opinion weakens its potential to mandate differentiated reparations that specifically address the unique historical harms suffered by the Global South.⁵¹ Furthermore, its brief treatment of sustainable development as a guiding principle undermines its call for a more integrated approach that balances economic, social, and environmental concerns, thus diluting its applicability in addressing historical resource reversals caused by colonial powers.⁵²

In his separate opinion, Vice-President Sebutinde critiques the opinion for not fully addressing the rights of vulnerable states, such as Small Island Developing States (SIDS) and Least Developed Countries (LDCs), and for failing to explore the profound implications of sea-level rise on statehood and self-determination.⁵³ He emphasises the need for greater responsibilities for developed states to preserve the habitats and cultural heritage of these vulnerable populations, aligning with our broader argument that reparations should recognize the

⁴⁹ Obligations of States in Respect of Climate Change (n 1) *supra* at paras. 48-52, 65 & 120.

⁵⁰ *ibid*, paras 120 & 150.

⁵¹ *ibid*, paras 148 & 151.

⁵² *ibid*, para 147 where the court tries to justify the lack of a detailed analysis of the same by saying that the principle has a continuous and uncontested universal recognition.

⁵³ See Sebutinde, Julia. Separate Opinion. Obligations of States in Respect of Climate Change, Advisory Opinion, 2025 I.C.J. Rep. 1, para. 1.

disproportionate burdens borne by the South.⁵⁴ Judge Xue also highlighted the importance of sustainable development and CBDR-RC as substantive cornerstones of justice, advocating for a framework rooted in historical fairness that distinguishes between the responsibilities of developed and developing countries.⁵⁵ She also reaffirms that human activities are the primary drivers of GHG emissions, reinforcing our assertion that Northern nations must be held accountable for their historical role in perpetuating carbon capitalism.⁵⁶ Judge Bhandari's opinion similarly highlights the insufficiency of the polluter-pays principle as presented in the judgment. He calls for a more granular exploration of compensation and equitable redress for irreversible losses, a position that mirrors our own advocacy for mandatory reparations as opposed to the current voluntary aid frameworks that often function as neo-colonial traps.⁵⁷

Judge Charlesworth, in her separate opinion, broadens the scope of climate justice by emphasising the rights of vulnerable populations such as Indigenous peoples, women, children, and those living in poverty.⁵⁸ She stresses the need for climate policies that protect these groups under non-discrimination principles, particularly as they face disproportionate impacts from climate change.⁵⁹ This perspective extends our equity analysis to ensure that reparations are inclusive of subaltern protections. Meanwhile, Judge Aurescu laments the opinion's failure to establish legal stability, suggesting that fixed baselines should be recognized as customary law.⁶⁰ He argues that this would prevent the misapplication of legal doctrines, such as *rebus sic stantibus*, which could distort future climate governance and perpetuate the vulnerabilities imposed on the Global South by

⁵⁴ *ibid.*

⁵⁵ Xue, Hanqin. Separate Opinion. Obligations of States in Respect of Climate Change, Advisory Opinion, 2025 I.C.J. Rep. 1, paras. 1-3.

⁵⁶ *ibid.*, para. 4.

⁵⁷ Bhandari, Dalveer. Separate Opinion. Obligations of States in Respect of Climate Change, Advisory Opinion, 2025 I.C.J. Rep. 1, para. 3.

⁵⁸ Charlesworth, Hilary. Separate Opinion. Obligations of States in Respect of Climate Change, Advisory Opinion, 2025 I.C.J. Rep. 1, paras. 2-3.

⁵⁹ *ibid.*, paras 7-8.

⁶⁰ Aurescu, Bogdan. Separate Opinion. Obligations of States in Respect of Climate Change, Advisory Opinion, 2025 I.C.J. Rep. 1, paras. 2-3.

historical emissions.⁶¹

The combined insights from these separate opinions expose the remedial shortcomings of the ICJ's judgment. Despite its recognition of the climate crisis as a global emergency, the opinion remains vague on the precise legal mechanisms for redress, particularly in relation to reparations for historical emissions. We contend that this imprecision, especially with respect to the distinction between grants and loans erodes the enforceability of reparations. The reliance on discretionary frameworks allows for continued debt entrapment, a dynamic that sustains the colonial financial systems that originally exacerbated the climate crisis.⁶² Additionally, the opinion's omission of fixed baselines as customary law threatens to perpetuate colonial maritime appropriations and hinder future territorial claims from states adversely affected by sea-level rise.⁶³ The judgment's treatment of damages and historical causality, especially with the IPCC attributing 57% of climate damage to Northern origins, is central to our argument that the Global North must take responsibility for its historical emissions and the ongoing impacts they have caused.⁶⁴ Policies like Article 4 of the Paris Agreement and the UNFCCC continue to demand robust climate finance but often fall short of addressing the specific financial needs of the Global South. These frameworks, despite their well-intentioned goals, are criticized for their lack of concrete financial commitments, further highlighted by the inequities observed during COP29,⁶⁵ where African nations' demands for tripling climate finance were rebuffed in favour of token pledges.⁶⁶

⁶¹ *ibid.*

⁶² Liane Schalatek and Julie-Anne Richards, 'The Loss and Damage Fund Board: Getting It Right from the Start' (Heinrich Böll Stiftung Washington, DC Office, 18 March 2024) <<https://us.boell.org/en/2024/03/18/loss-and-damage-fund-board-getting-it-right-start>> accessed 26 December 2025.

⁶³ Aurescu (n 60) paras 2-3.

⁶⁴ Obligations of States in Respect of Climate Change (n 1) para 457: Intergovernmental Panel on Climate Change. Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, edited by P. R. Shukla et al., Cambridge UP, 2022, p. 218, <https://doi.org/10.1017/9781009157926>.

⁶⁵ CHN. "COP29 Bulletin Day 9: Developing Nations Deride (n 43).

⁶⁶ Christina Voigt, 'Doing the Utmost: Due Diligence as the Standard of Conduct in

While the ICJ opinion offers a progressive step forward by recognizing the connection between human rights and climate obligations, its hesitancy to fully address the need for reparations leaves many questions unresolved. The opinion's failure to definitively establish the clean and healthy environment as a customary right, despite widespread endorsements, limits its ability to address the procedural and protective needs of vulnerable populations facing displacement due to climate impacts.⁶⁷ We propose an intertemporal application⁶⁸ of international law that treats pre-1992 emissions as perennial harms, litigatable through tribunals to ensure accountability and equity. The widespread calls for enhanced climate finance and reparations, particularly from African delegations at COP27, COP 28 and COP 29, highlights the need for an equitable recalibration of international law⁶⁹ to address the burdens placed on the Global South by historical emissions. This opinion serves as a guide toward greater equity but requires recalibration to fully address the historical injustices that continue to shape the climate crisis. The following section will further analyse these obligations through the lens of Third World perspectives, dissecting colonial governance legacies to champion mandatory reparations as a necessary path to justice.

4.0. Mirrors of Marginalization: Reflecting TWAIL Perspectives on Climate Equity

The persistent North-South asymmetries in international law, as highlighted in our examination of the ICJ's advisory opinion, reinforce colonial hierarchies that continue to marginalize the Global South in climate governance. These entrenched inequities demand a paradigm shift, one that moves from voluntary

International Climate Law' (Verfassungsblog, 3 September 2025) < <https://blogs.law.columbia.edu/climatechange/2025/09/03/doing-the-utmost-due-diligence-as-the-standard-of-conduct-in-international-climate-law/> > accessed 26 December 2025.

⁶⁷ See Charlesworth (n 58) para 8; Aurescu (n 60) paras 28-29.

⁶⁸ For an understanding of how intertemporal law works see Elvis Mogesa Ongiri, 'Decolonizing Intertemporal Law through the Lens of the Mau Reparations Campaign' (2025) 119 AJIL Unbound 182.

⁶⁹ Lavanya Rajamani, 'The Changing Fortunes of Differential Treatment in the Evolution of International Environmental Law' (2021) 88 International Affairs 605, 622.

finance toward enforceable reparations grounded in a decolonized framework of accountability.⁷⁰ The ICJ's adoption of the *erga omnes* principle, while a step forward, ultimately fails to address the enduring colonial legacies that still shape climate law and policy. As pointed out by TWAIL scholars, international law often evades the historical scrutiny of colonialism's resource plunder,⁷¹ which not only eroded equitable access to the global commons, such as the atmosphere, but also inverted the flow of value, imposing ecological deficits now exacerbated by greenhouse gas emissions.⁷² This failure to confront the historical underpinnings of the climate crisis perpetuates existing imbalances, leaving the Global South to bear the brunt of climate impacts despite having contributed minimally to their origins. This highlights the need for binding reparations, as opposed to voluntary financial aid, in order to restore justice and equitable distribution of global resources.⁷³

The inadequacy of the current climate finance system is evident in the protests led by African nations and other developing countries at COP27,⁷⁴ and COP29.⁷⁵ At COP27, the Global South demanded a significant increase in adaptation finance, calling for \$300-400 billion annually to address the escalating climate impacts.⁷⁶ However, Northern nations responded with a meager commitment of only \$100 billion by 2025.⁷⁷ This gap was further underscored at COP29, where the Global South requested \$1 trillion annually, only to have their demands

⁷⁰M Nyka, 'State Responsibility for Climate Change Damages' (2021) 45(2) *Review of European and Comparative Law* 131-152; S Chenier and D Tremblay, 'Climate Reparations and Legal Accountability: Bridging International Law and Environmental Justice' (2025) 4(2) *Interdisciplinary Studies in Society, Law, and Politics* 265-279, 266.

⁷¹BS Chimni, 'Third World Approaches to International Law: A Manifesto' (2006) 8(1) *International Community Law Review* 3.

⁷²Chenier (n 70) 266.

⁷³Nyka (n 70).

⁷⁴Parvez Ahmad Rony, "'Our Futures Are Being Stolen!' Youth Activists Tell COP27 Negotiators It's Past Time to Tackle 'Loss and Damage.'" (UN News, 10 November 2022) < <https://news.un.org/en/story/2022/11/1130422> > accessed 15 December 2025.

⁷⁵CHN, "COP29 Bulletin Day 9: Developing Nations Deride (n 43).

⁷⁶Rony (n 74).

⁷⁷*ibid.*

dismissed in favour of token pledges.⁷⁸ These disparities are not just a result of political negotiations but reflect a broader pattern of historical exploitation, where the Global North continues to benefit from emissions-intensive industrialization,⁷⁹ while the Global South is left to bear the cost. This dynamic is not new, it echoes the tensions first exposed at the 1972 Stockholm Conference, where the Global South resisted the imposed development-environment dichotomy, which pit economic growth against environmental sustainability.⁸⁰ Gandhi's speech at Stockholm highlighted the need to fuse justice with environmental protection, a theme that remains crucial in today's climate negotiation.⁸¹ Southern nations at the time rejected the compartmentalization of nature that had enabled exploitation, instead advocating for an integrated approach that balanced economic and environmental priorities.

This evolution in the Global South's stance on climate justice reveals systemic biases within the current international legal framework, particularly in how loss and damage negotiations are structured. Voluntary aid, as it currently exists, only reinforces these inequities, leaving the Global South in a cycle of dependence and debt.⁸² The system of voluntary commitments, where Northern nations pledge financial support without binding obligations, has proven ineffective in

⁷⁸ Staff (n 75).

⁷⁹ N Gaikwad, F Genovese and D Tingley, 'Creating Climate Coalitions: Mass Preferences for Compensating Vulnerability in the World's Two Largest Democracies' (2022) 116(4) *American Political Science Review* 1165.

⁸⁰ UN, 'United Nations Conference on the Environment, Stockholm 1972' (16 June 1972) < <http://un.org/en/conferences/environment/stockholm1972> > accessed 26 December 2025; UN, 'Report of the United Nations Conference on the Human Environment, Stockholm, 5-16 June 1972' UN Doc A/CONF.48/14/Rev.1 (1973) < <http://digitallibrary.un.org/record/523249?ln=en> > accessed 14 December 2025.

⁸¹ Malavika Rao, 'A TWAIL Perspective on Loss and Damage from Climate Change: Reflections from Indira Gandhi's Speech at Stockholm' (2022) 12 *Asian Journal of International Law* 1-19; Karl Mathiesen, 'Climate Change and Poverty: Why Indira Gandhi's Speech Matters' *The Guardian* (6 May 2014) < <https://www.theguardian.com/global-development-professionals-network/2014/may/06/indira-gandhi-india-climate-change> > accessed 14 December 2025.

⁸² Fentaw Leykun, 'Climate Change and External Debt Vulnerability: The Case of Sub-Saharan Africa' (2024) 13(1) *Journal of Innovation and Entrepreneurship* 1.

addressing the magnitude of the climate crisis. What is required is a shift to mandatory disbursements based on historical responsibility, evaluated through methodologies like those employed by the IPCC and CAIT, which factor in both cumulative emissions and vulnerability to climate impacts.⁸³ This would ensure that countries with the largest historical contributions to climate change, such as the United States and European Union, shoulder a greater financial burden.⁸⁴ This approach aligns with the polluter-pays principle, which holds that those responsible for the greatest environmental harm must take on the largest share of the responsibility for rectifying it.⁸⁵

Moreover, the application of intertemporal law is essential in addressing climate justice from a historical perspective. Intertemporal law proposes that past violations of international law continue to be considered as ongoing breaches and thus, reparative obligations should not be time-barred.⁸⁶ This approach is critical in the context of colonial emissions, which have had long-lasting environmental impacts and continue to affect the Global South today. Proposals to amend the UNFCCC to recognize pre-1992 emissions as perpetual violations would enable a legal framework that holds industrialized nations accountable for the emissions they produced during their period of rapid industrialization, a responsibility that should extend beyond the present-day accounting practices.⁸⁷ These revisions would allow for the imposition of binding reparations, ensuring that the financial burden is placed squarely on those who contributed the most to the climate

⁸³ Anis Chowdhury and Kwame Sundaram Jomo, 'The Climate Finance Conundrum' (2022) 65 *Development* 21; Chenier (n 70) 275.

⁸⁴ UNCTAD, *Trade and Development Report 2021: From Recovery to Resilience – the Development Dimension* (UN 2021).

⁸⁵ MCC Stabile and others, 'Slowing Deforestation in the Brazilian Amazon: Avoiding Legal Deforestation by Compensating Farmers and Ranchers' (2022) 4 *Frontiers in Forests and Global Change* 1, 8.

⁸⁶ Taslim Olawale Elias, *The International Court of Justice and Some Contemporary Problems: Essays on International Law* (Springer 1983) 120; Andreas von Arnould, 'How to Illegalize Past Injustice: Reinterpreting the Rules of Intertemporality' (2021) *EJIL* 405.

⁸⁷ LH Meyer, 'Compensating Wrongless Historical Emissions of Greenhouse Gases' (2004) 11 *Ethical Perspectives* 20; S Caney, 'Environmental Degradation, Reparations, and the Moral Significance of History' (2006) 37 *Journal of Social Philosophy* 464.

crisis.⁸⁸

A more people-centred approach to climate finance is also necessary.⁸⁹ Rather than relying solely on state-to-state transfers, which often bypass the needs of the most marginalized, reparations should be directed toward indigenous and autonomous communities.⁹⁰ These groups, who have historically been disenfranchised and whose lands have borne the brunt of environmental degradation, must be empowered to lead the charge in mitigating and adapting to climate change.⁹¹ Grassroots countermeasures to climate impacts, such as community-based resilience programs, must be prioritized in reparations, as they are often more effective and sustainable than top-down state interventions.⁹² This approach ensures that the funds are not only addressing the immediate impacts of climate change but also supporting long-term, localized efforts to restore justice to communities that have been systematically harmed.

Furthermore, the distribution of reparations must be designed in a way that accounts for the colonial legacy of territorial dispossession. The financial mechanisms established in international climate agreements must actively deter the ongoing territorialization of the South by the North.⁹³ The current system of climate finance, with its emphasis on loans over grants, replicates the colonial economic systems that have historically left the Global South in a perpetual state of debt.⁹⁴ Moving toward a system where reparations are delivered as non-repayable grants, based on the historical emissions of high-emitting states, would help break the cycle of debt and dependency.

⁸⁸ Chenier (n 70) 272, 274 & 275.

⁸⁹ Luis H Zamarioli and others, 'Country Ownership as the Means for Paradigm Shift: The Case of the Green Climate Fund' (2020) 12(14) *Sustainability* 1.

⁹⁰ *ibid*, 275.

⁹¹ Stabile (n 85).

⁹² V Storr and S Haeffele-Balch, 'Post-Disaster Community Recovery in Heterogeneous, Loosely Connected Communities' (2012) 70 *Review of Social Economy* 295.

⁹³ MB Rasmussen and C Lund, 'Reconfiguring Frontier Spaces: Territorialization and Resource Control' (2018) 101 *World Development* 388.

⁹⁴ Fentaw Leykun, 'Climate Change and External Debt Vulnerability: The Case of Sub-Saharan Africa' (2024) 13(1) *Journal of Innovation and Entrepreneurship* 18.

This comprehensive approach to reparations, which includes intertemporal accountability,⁹⁵ people-centred distribution,⁹⁶ and a decolonized view of climate finance, provides a pathway for addressing the historical wrongs that continue to shape the climate crisis. By recognizing the legacy of colonialism in environmental degradation, we can create a more just and equitable system of climate governance, one that ensures the Global South is not only compensated for past harms but also empowered to lead the way in combating the climate crisis.

The integration of TWAIL perspectives,⁹⁷ into climate justice is crucial for moving beyond the superficial gestures offered by the ICJ and other international legal frameworks.⁹⁸ By foregrounding the need for reparations that are mandatory, legally binding and rooted in historical accountability, we can shift the conversation from voluntary aid to reparative justice. This will require a fundamental restructuring of international climate law, one that recognizes the long-standing inequities of the North-South divide,⁹⁹ and provides a just path forward for the most vulnerable nations and communities.

The next section will detail the necessary reforms for mandatory reparations, emphasizing the importance of the polluter-pays principle and critiquing the current financial mechanisms to ensure enforceable systems of reparative justice.

5.0. Bridges Over Troubled Waters: Constructing Mandatory Pathways in Climate Finance

The dynamics of climate finance, as outlined in our critique of colonial governance legacies, reveal deep systemic inequities that are only exacerbated by

⁹⁵ Elias (n 86) 120.

⁹⁶ Zamarioli (n 89).

⁹⁷ Malavika Rao, 'A TWAIL Perspective on Loss and Damage from Climate Change: Reflections from Indira Gandhi's Speech at Stockholm' (2022) 12(1) *Asian Journal of International Law* 63.

⁹⁸ Chenier (n 70) 273. Advisory opinions of the ICJ are not legally binding and are mostly dependent on the political will of member states to enforce them.

⁹⁹ Chimni (n 71).

voluntary paradigms of assistance.¹⁰⁰ These paradigms often fail to redress the historical injustices embedded in the global climate system. To achieve true reparative justice, we advocate for the restructuring of climate finance into compulsory frameworks,¹⁰¹ where developed nations are obligated to contribute annually between \$500 billion and \$600 billion, based on social cost of carbon valuations at \$75 per ton.¹⁰² This approach directly correlates with the magnitude of historical damages stemming from industrialization. High-emitting countries, especially those responsible for the majority of historical emissions, such as the United States and the European Union, must bear a disproportionate financial burden.¹⁰³ These contributions should prioritize the most vulnerable countries, such as Least Developed Countries (LDCs),¹⁰⁴ and Small Island Developing States (SIDS), with climate finance tailored to their specific needs and vulnerabilities, rather than mirroring the needs of developed nations.¹⁰⁵ This recalibration would transform climate finance from voluntary aid into reparations, which are both legally binding and enforceable, thereby overcoming the neo-colonial constraints of current voluntary frameworks. To ensure that climate finance aligns with the scale of past emissions, it is critical to calculate ecological debt using the

¹⁰⁰ Anis Chowdhury and Kwame Sundaram Jomo, 'The Climate Finance Conundrum' (2022) 65 *Development* 29. With declining aid in the form of grants, developing countries face a cruel dilemma, having to choose between increased climate indebtedness and inaction. Climate change impacts exacerbate development challenges, increasing loan and aid dependence (Picolotti and Miller 2020).

¹⁰¹ Chenier (n 70) 267.

¹⁰² Simon Jessop and others, 'EXCLUSIVE COP27: IMF Chief Says \$75/Ton Carbon Price Needed by 2030' (Reuters, 7 November 2022) < <https://www.reuters.com/business/cop/exclusive-cop27-imf-chief-says-75ton-carbon-price-needed-by-2030-2022-11-07/> > accessed 15 December 2025.

¹⁰³ UNCTAD (n 84).

¹⁰⁴ World Bank, 'Debt Burden of Least Developed Countries Continues to Climb to a Record \$744 Billion in 2019' (2020) < <https://www.worldbank.org/en/news/press-release/2020/10/12/debt-burden-of-least-developed-countries-continues-to-climb-to-a-record-744-billion-in-2019> > accessed 16 December 2025. As at 2020, the debt burden of the least developed countries (LDCs) alone reached a record US\$744bn. They should therefore be prioritized in funding.

¹⁰⁵ Simon Ritu Addison, 'Addressing Loss and Damage: Practical Insights for Tackling Multidimensional Risks in LDCs and SIDS' (International Institute for Environment and Development 2022) 18.

cumulative CO₂ emissions from 1850 onward. Since the onset of the Industrial Revolution in 1850 up to 2019, Least Developed Countries (LDCs) accounted for only 0.4% of total cumulative CO₂ emissions, while Small Island Developing States (SIDS) contributed approximately 0.5%.¹⁰⁶ In contrast, developed countries were responsible for the largest share of historical cumulative emissions, contributing around 57% of the global total.¹⁰⁷ Several findings indicate that the Global North has already exceeded its equitable share of both the 1.5 °C and 2 °C carbon budgets, irrespective of whether these allocations are calculated from 1850, 1960, or 1992.¹⁰⁸ Any additional emissions from developed nations therefore represent a continued appropriation of the fair carbon shares belonging to other countries. In contrast, the Global South remains well within its equitable share of the 1.5 °C budget.¹⁰⁹ Under an ambitious net-zero-by-2050 scenario, however, approximately 50% of the South's fair share would be effectively consumed by wealthy nations. Therefore, by 2050, compensation amounting to **US \$192 trillion** would be owed to the undershooting nations of the Global South.¹¹⁰

Using this debt figure, we propose the following equation to determine annual contributions:

Annual contribution = (Total debt × Share of emissions) / 50 years, modulated for GDP/capita.

For example, the United States, with an excess of 100 gigatonnes of CO₂ emissions beyond its equitable share, would owe \$7.5 trillion annually, prorated across 50 years, which translates into an annual contribution of \$150 billion. This amount would be further adjusted for GDP/capita, with wealthier nations paying a greater share of the total debt. This method ensures a precise and accountable financial allocation that reflects the magnitude of historical

¹⁰⁶ S Dhakal and others, 'Emissions Trends and Drivers' in PR Shukla and others (eds), *Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (CUP 2022) 233.

¹⁰⁷ HD Matthews, 'Quantifying Historical Carbon and Climate Debts among Nations' (2016) 6(1) *Nature Climate Change* 60.

¹⁰⁸ Fanning (n 10) 1082.

¹⁰⁹ *ibid.*

¹¹⁰ *ibid.*

emissions, offering a solution to the frequent qualms over attribution.

The current climate finance mechanisms, such as the Green Climate Fund, the Adaptation Fund, and the Loss and Damage Fund are deeply inadequate in addressing the magnitude of the crisis. The Green Climate Fund, while pledging \$30 billion for mitigation and adaptation, is insufficient given the scale of the required financial support.¹¹¹ Similarly, the Adaptation Fund is severely underfunded to meet the needs of the most vulnerable countries.¹¹² The Loss and Damage Fund, designed to address irreversible losses such as those experienced by SIDS, is also woefully inadequate, with pledges of just \$768 million, a far cry from the \$580 billion annually needed.¹¹³ One of the key criticisms of these funds is their lack of autonomy. The World Bank's stewardship of the Loss and Damage Fund, for example, risks perpetuating debt traps that resemble colonial-era financial dependencies, where loans, rather than grants, create long-term financial burdens for developing countries.¹¹⁴ This reinforces the systemic inequalities in the global climate finance system, and fails to align with the human rights protections outlined in the ICJ's advisory opinion.

To address these deficiencies, we propose that climate finance be restructured with mandatory grant-based allocations,¹¹⁵ overseen by an independent UN entity with Southern-majority boards. This restructuring, aligned with TWAIL principles, would ensure that the most vulnerable countries are not left at the

¹¹¹ David Ciptet and others, 'The Politics of International Climate Adaptation Funding: Justice and Divisions in the Greenhouse' (2013) 13(1) *Global Environmental Politics* 49.

¹¹² Georgia Savvidou and Nella Canales, 'Three Major Gaps in Climate-Adaptation Finance for Developing Countries' (SEI, 10 November 2023) < <https://www.sei.org/perspectives/three-major-gaps-in-climate-adaptation-finance-for-developing-countries/> > accessed 20 December 2025.

¹¹³ Heinrich Böll Stiftung, 'Fund for Responding to Loss and Damage - Climate Funds Update' (13 May 2025) < <https://climatefundsupdates.org/wp-content/uploads/2025/03/CFF13-2025-ENG-FRLD-DIGITAL.pdf> > accessed 22 December 2025.

¹¹⁴ B Getzel and M Robertson, 'Will the World Bank Make Good on the Loss and Damage Fund?' (ODI: Think Change, 8 December 2023) < <https://odi.org/en/insights/will-the-world-bank-make-good-on-the-loss-and-damage-fund/> > accessed 22 December 2025.

¹¹⁵ Mizan Khan and others, 'Twenty-Five Years of Adaptation Finance through a Climate Justice Lens' (2020) 161 *Climatic Change* 251.

mercy of voluntary pledges, which are often insufficient or delayed. We recommend that the oversight of these funds shift away from financial institutions with historical ties to the Global North, such as the World Bank,¹¹⁶ to ensure greater equity and transparency. Such an approach would align with the ICJ's broader commitment to human rights, ensuring that climate finance is distributed based on both historical responsibility and current vulnerability.

The polluter-pays principle should form the core of this restructured climate finance system.¹¹⁷ Historical emitters, particularly the US and UK, must contribute proportionately more than other countries.¹¹⁸ Using data from the IPCC and CAIT databases, we can assess each country's share of global emissions, factoring in both past emissions and vulnerability.¹¹⁹ LDCs and SIDS should receive priority in the distribution of funds, as these nations are not only the least responsible for emissions but also the most vulnerable to climate impacts.¹²⁰ The application of intertemporal law, which assigns responsibility for pre-1992 emissions as ongoing violations, ensures that climate justice is not limited to the current generation but holds past industrializers accountable for their historical contributions to the crisis.

To address the critiques of TWAIL being overly radical, we emphasize that its advocacy for reparative justice is grounded in fairness and historical accountability, rather than an unrealistic or utopian vision.¹²¹ The principles of fairness and equity, as outlined in the CBDR-RC framework, ensure that high-emitting countries are held to account for their disproportionate role in climate

¹¹⁶ Getzel (n 114).

¹¹⁷ Rio Declaration on Environment and Development (adopted 14 June 1992, UN Doc. A/CONF.151/26 (Vol. I)) Principle 16.

¹¹⁸ HD Matthews, 'Quantifying Historical Carbon and Climate Debts among Nations' (2016) 6 *Nature Climate Change* 60.

¹¹⁹ Leandro Vigna, 'Climate Watch (CAIT): Country Greenhouse Gas Emissions Data' (World Resources Institute, 2025) < <https://www.wri.org/data/climate-watch-cait-country-greenhouse-gas-emissions-data?campaign=752614> > accessed 23 December 2025.

¹²⁰ Addison (n 105).

¹²¹ SG Sreejith, 'An Auto-Critique of TWAIL's Historical Fallacy: Sketching an Alternative Manifesto' (2016) 38(7) *Third World Quarterly* 1511.

change, while also ensuring that the most vulnerable countries are prioritized in the distribution of reparations.¹²² The mandatory nature of reparations, as opposed to the current voluntary financial commitments, guarantees that the funds will be directed toward those who need them most, without the constraints imposed by neo-colonial aid structures.

Finally, the feasibility of these proposals is not only a matter of political will but also of legal and technical capability. By leveraging the ICJ's jurisprudence on state responsibility and utilizing IPCC methodologies for emissions tracking, we can create a legally enforceable system that ensures the timely and adequate transfer of climate finance. Furthermore, the establishment of regular audits and the use of real-time emissions data, such as those from the EDGAR database, would ensure transparency and accountability in the allocation of funds.¹²³ This system would be reinforced by annual audits under the UNFCCC, guaranteeing that the financial pledges are met and that they align with the evolving needs of the Global South. The proposed reform of climate finance is a necessary step towards achieving climate justice. By restructuring the financial system to ensure reparations are mandatory, enforceable and equitable, we can create a global system that addresses both historical and contemporary inequalities. This would not only provide much-needed support for vulnerable countries but also shift the burden of responsibility from voluntary aid to legally binding reparations, rooted in the principle of historical justice. The next section will explore the potential pathways for implementing these reforms, ensuring that the system is both actionable and sustainable for the future.

6.0. Horizons of Harmony: Envisioning a Just Climate Future

The legacies of industrialization and colonialism demand that climate reparations be implemented in a manner that addresses both historical and

¹²² I Ari and R Sari, 'Developing CBDR-RC Indices for Fair Allocation of Emission Reduction Responsibilities and Capabilities across Countries' (2017) 3 *Cogent Environmental Science* art 1420365.

¹²³ European Commission, 'Joint Research Centre Data Catalogue - Emissions Database for Global Atmospheric Research' (30 September 2025) <<https://data.jrc.ec.europa.eu/collection/EDGAR>> accessed 24 December 2025.

ongoing injustices.¹²⁴ As illustrated through our critique of the ICJ's 2025 advisory opinion, and drawing from insights within the TWAIL framework, we assert that the Global South's continued marginalization within global climate governance necessitates reparations as a matter of historical justice, rather than voluntary aid.¹²⁵ Through our analysis, we traced the evolution of industrial powers from their 19th-century coal-driven expansion to the 20th-century oil dominance, which led to the Northern bloc being responsible for 70-80% of cumulative global emissions. The consequences of this historical debt are still evident in the recent climate disasters of the Global South, such as the 2022 floods in Pakistan and the ongoing droughts in Ethiopia.¹²⁶ The colonial exploitation of resources, which laid the groundwork for much of this environmental damage, requires that pre-1992 emissions be treated as ongoing breaches of international law under various provisions of ARSIWA Articles.¹²⁷ This will ensure that reparative measures are implemented through a legal framework that holds states accountable, bridging temporal gaps and addressing the roots of colonial resource extraction.

The ICJ's recognition of *erga omnes* obligations, while progressive in its acknowledgment of state duties to prevent significant climate harm, fails to provide the financial structure necessary for true climate reparations. Although the ICJ links prevention,¹²⁸ cooperation,¹²⁹ and human rights obligations, the lack of clear financial reparations, especially in terms of quantifying liability for historical emissions, remains a critical shortcoming. The separate opinions of

¹²⁴ Nishtha Singh, 'Climate Justice in the Global South: Understanding the Environmental Legacy of Colonialism' (E-International Relations, 2 February 2023) 1-11 < <https://www.e-ir.info/2023/02/02/climate-justice-in-the-global-south-understanding-the-environmental-legacy-of-colonialism/> > accessed 24 December 2025.

¹²⁵ Fanning (n 10) 1082.

¹²⁶ Sharon Burke and others, 'How Floods in Pakistan Threaten Global Security' (World Resources Institute, 14 February 2023) < <https://www.wri.org/insights/pakistan-floods-threaten-global-security> > accessed 24 December 2025.

¹²⁷ ILC, 'Articles on Responsibility of States for Internationally Wrongful Acts, with Commentaries' (2001) II(2) YB Intl L Comm'n 26, UN Doc A/56/10, arts 1, 14, 47, pp 32, 58-59, 126-127.

¹²⁸ Obligations of States in Respect of Climate Change (n 1) para. 299.

¹²⁹ Obligations of States in Respect of Climate Change (n 1) paras. 260-267.

Judges Xue,¹³⁰ and Sebutinde,¹³¹ underscore the importance of CBDR-RC as a framework for addressing the differing responsibilities of developed and developing countries. By integrating this principle, we argue that high-emitting nations, particularly the US and EU, should commit to annual reparations of \$500 billion to \$600 billion, based on their historical emissions and social cost of carbon valuations. Using methodologies such as those outlined above, this figure would be derived from the \$192 trillion in global emissions debt,¹³² ensuring that financial contributions are proportionate to each country's role in the climate crisis.

These reframing transforms climate finance from a voluntary contribution into an obligatory reparatory mechanism. It highlights the insufficiency of current funds, like the Loss and Damage Fund, which pledges only \$768 million in response to the estimated \$580 billion annually needed to address the global climate crisis.¹³³ The current financial frameworks fail to meet the scale of need, especially as the world faces increasingly frequent and severe climate disasters. These funds, as they stand, mirror the colonial systems of financial control that placed the Global South in perpetual debt. To rectify this, we propose the establishment of a mandatory, grant-based system, overseen by an independent UN body with a Southern-majority board, ensuring that the finance is directed to those who need it most without the strings of debt traps.¹³⁴

Addressing potential counterarguments, we emphasize that the feasibility of attributing historical emissions is not a barrier to implementation. The ICJ's endorsement of probabilistic models for climate damage attribution ensures that emissions can be linked to specific climate impacts with precision.¹³⁵ This model enables the creation of a fair, enforceable system of reparations that does not rely on vague political agreements but on clear, scientifically-backed methodologies.

¹³⁰ Xue (n 55) paras. 1-3.

¹³¹ See Sebutinde (n 53) para. 1.

¹³² Fanning (n 10) 1082.

¹³³ Heinrich Böll Stiftung (n 113).

¹³⁴ G Savvidou and others, 'Quantifying International Public Finance for Climate Change Adaptation in Africa' (2021) 21(8) *Climate Policy* 1020.

¹³⁵ *Obligations of States in Respect of Climate Change* (n 1) *supra* at paras. 425-432.

Additionally, criticisms of shared benefits from industrialization are effectively countered by the stark reality of the net harms faced by the Global South. These harms are not abstract; they materialize through the depletion of natural resources, environmental degradation and the disproportionate climate impacts borne by the Global South, dynamics that scholars of racial capitalism identify as enduring legacies of colonial extraction and global economic hierarchies.¹³⁶ The historical and contemporary realities of climate change demand reparations that reflect the full scope of harm, not just the shared gains that some claim.

The proposed climate reparations framework also emphasizes the need for intertemporal law, ensuring that past emissions are viewed as continuous breaches of international law. This intertemporal approach is critical for framing climate reparations within a legal context that holds past industrializers accountable. It also ensures that future generations do not inherit a climate system dominated by the interests of wealthy, polluting nations. By proposing that colonial emissions be treated as perpetual violations, we advocate for a comprehensive legal approach that upholds the principles of equity and justice.¹³⁷ This approach is essential for empowering the Global South and ensuring that reparations are not simply a political gesture but a fundamental legal obligation. The proposed reforms would address the systemic inequities within the current climate finance system. By incorporating the polluter-pays principle, prioritizing the most vulnerable nations, and ensuring that reparations are distributed based on historical responsibility and vulnerability, we can move towards a more equitable global climate system. This would not only fulfill the moral imperative of reparations but also provide a framework for sustainable climate finance that is both fair and actionable.¹³⁸ The financial contributions made by high-emitting countries would be directly linked to their historical emissions and the harm caused to the Global South.

¹³⁶ See Anghie (n 16) 101-107.

¹³⁷ Julia Dehm, 'Carbon Colonialism or Climate Justice? Interrogating the International Climate Regime from a TWAIL Perspective' (2017) 33(3) *Windsor Yearbook of Access to Justice* 129.

¹³⁸ Simon Caney, 'Climate Justice and the Moral Relevance of the Past' (2024) 12(1) *Journal of Practical Ethics* 1, 12.

A just climate future is one where reparations are mandatory, enforceable and equitable. This vision requires a radical shift from the current voluntary financial mechanisms that perpetuate global inequalities to a legally binding system of climate justice that holds industrialized nations accountable for their historical and ongoing emissions. Future research should focus on refining this reparations framework, integrating indigenous knowledge systems, and further developing vulnerability metrics that account for intersecting social and economic factors like gender and poverty. By building a robust, equitable, and enforceable system of climate reparations, we can move towards a truly just climate future, where the Global South is empowered, and the historical debt of the Global North is finally acknowledged and addressed.

Bibliography

Books

Anghie A, *Imperialism, Sovereignty and the Making of International Law* (CUP 2005)
Di Muzio T, *Carbon Capitalism: Energy, Social Reproduction and World Order*
(Rowman & Littlefield International 2015)
Elias TO, *The International Court of Justice and Some Contemporary Problems: Essays on International Law* (Springer 1983)

Book Chapters

Atapattu S and Gonzalez CG, 'TWAIL, Climate Change and the North-South Divide' in Anghie A and others (eds), *The TWAIL Handbook* (Edward Elgar forthcoming 2025)
Dhakal S and others, 'Emissions Trends and Drivers' in Shukla PR and others (eds), *Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (CUP 2022)
Nanda V, 'Global Climate Change and International Law and Institutions' in Nanda V (ed), *World Climate Change: The Role of International Law & Institutions* (1983)
Spivak GC, 'Can the Subaltern Speak?' in Morris RC (ed), *Can the Subaltern Speak?: Reflections on the History of an Idea* (Columbia UP 2010)

Journal Articles

Ari I and Sari R, 'Developing CBDR-RC Indices for Fair Allocation of Emission Reduction Responsibilities and Capabilities across Countries' (2017) 3 *Cogent Environmental Science* art 1420365
Burkett M, 'Root and Branch: Climate Catastrophe, Racial Crises, and the History and Future of Climate Justice' (2021) 134(6) *Harvard Law Review Forum* 327
Caney S, 'Climate Justice and the Moral Relevance of the Past' (2024) 12(1) *Journal of Practical Ethics* 1
Caney S, 'Environmental Degradation, Reparations, and the Moral Significance of History' (2006) 37 *Journal of Social Philosophy* 464
Chenier S and Tremblay D, 'Climate Reparations and Legal Accountability: Bridging International Law and Environmental Justice' (2025) 4(2) *Interdisciplinary Studies in Society, Law, and Politics* 265
Chimni BS, 'Third World Approaches to International Law: A Manifesto' (2006) 8(1) *International Community Law Review* 3
Chowdhury A and Jomo KS, 'The Climate Finance Conundrum' (2022) 65 *Development* 21

- Ciplet D and others, 'The Politics of International Climate Adaptation Funding: Justice and Divisions in the Greenhouse' (2013) 13(1) *Global Environmental Politics* 49
- Dehm J, 'Carbon Colonialism or Climate Justice? Interrogating the International Climate Regime from a TWAIL Perspective' (2017) 33(3) *Windsor Yearbook of Access to Justice* 129
- Duan L and others, 'Acid Deposition in Asia: Emissions, Deposition, and Ecosystem Effects' (2016) 146 *Atmospheric Environment* 55
- Fanning AL and Hickel J, 'Compensation for Atmospheric Appropriation' (2023) 6 *Nature Sustainability* 1077
- Francis AR, 'Global Southerners in the North' (2021) 93 *Temple Law Review* 689
- Gaikwad N, Genovese F and Tingley D, 'Creating Climate Coalitions: Mass Preferences for Compensating Vulnerability in the World's Two Largest Democracies' (2022) 116(4) *American Political Science Review* 1165
- Goldson R, 'In Between the Global North-South Divide: Reassessing Climate Reparations as a State-to-State Transaction' (2024) 38(1) *Temple International and Comparative Law Journal* 147
- Khan M and others, 'Twenty-Five Years of Adaptation Finance through a Climate Justice Lens' (2020) 161 *Climatic Change* 251
- Leykun F, 'Climate Change and External Debt Vulnerability: The Case of Sub-Saharan Africa' (2024) 13(1) *Journal of Innovation and Entrepreneurship* 1
- Martyr-Koller R and others, 'Loss and Damage Implications of Sea-Level Rise on Small Island Developing States' (2021) 50 *Current Opinion in Environmental Sustainability* 245
- Matthews HD, 'Quantifying Historical Carbon and Climate Debts among Nations' (2016) 6 *Nature Climate Change* 60
- Meyer LH, 'Compensating Wrongless Historical Emissions of Greenhouse Gases' (2004) 11 *Ethical Perspectives* 20
- Mogesa Ongiri E, 'Decolonizing Intertemporal Law through the Lens of the Mau Reparations Campaign' (2025) 119 *AJIL Unbound* 182
- Müller B, Höhne N and Ellermann C, 'Differentiating (Historic) Responsibilities for Climate Change' (2009) 9(6) *Climate Policy* 593
- Natarajan U and Khoday K, 'Locating Nature: Making and Unmaking International Law' (2014) 27 *Leiden Journal of International Law* 573
- Nyka M, 'State Responsibility for Climate Change Damages' (2021) 45(2) *Review of European and Comparative Law* 131
- Peša I, 'Toxic Coloniality and the Legacies of Resource Extraction in Africa' (2023) 9(2) *International Review of Environmental History* 33
- Rajamani L, 'The Changing Fortunes of Differential Treatment in the Evolution

- of International Environmental Law' (2021) 88 *International Affairs* 605
- Rao M, 'A TWAIL Perspective on Loss and Damage from Climate Change: Reflections from Indira Gandhi's Speech at Stockholm' (2022) 12 *Asian Journal of International Law* 66
- Rasmussen MB and Lund C, 'Reconfiguring Frontier Spaces: Territorialization and Resource Control' (2018) 101 *World Development* 388
- Savvidou G and others, 'Quantifying International Public Finance for Climate Change Adaptation in Africa' (2021) 21(8) *Climate Policy* 1020
- Sreejith SG, 'An Auto-Critique of TWAIL's Historical Fallacy: Sketching an Alternative Manifesto' (2016) 38(7) *Third World Quarterly* 1511
- Stabile MCC and others, 'Slowing Deforestation in the Brazilian Amazon: Avoiding Legal Deforestation by Compensating Farmers and Ranchers' (2022) 4 *Frontiers in Forests and Global Change* 1
- Storr V and Haeffele-Balch S, 'Post-Disaster Community Recovery in Heterogeneous, Loosely Connected Communities' (2012) 70 *Review of Social Economy* 295
- von Arnault A, 'How to Illegalize Past Injustice: Reinterpreting the Rules of Intertemporality' (2021) 32 *EJIL* 401
- Weatherill CK, 'Sinking Paradise? Climate Change Vulnerability and Pacific Island Extinction Narratives' (2023) 145 *Geoforum* art 103566
- Zamarioli LH and others, 'Country Ownership as the Means for Paradigm Shift: The Case of the Green Climate Fund' (2020) 12(14) *Sustainability* 1

Reports

- Addison SR, 'Addressing Loss and Damage: Practical Insights for Tackling Multidimensional Risks in LDCs and SIDS' (International Institute for Environment and Development 2022)
- Aurescu B, Separate Opinion, *Obligations of States in Respect of Climate Change*, Advisory Opinion, 2025 ICJ Rep 1
- Bhandari D, Separate Opinion, *Obligations of States in Respect of Climate Change*, Advisory Opinion, 2025 ICJ Rep 1
- Center for Economic and Social Rights, *Key Concepts: Climate Finance, Reparations, and Human Rights* (10 November 2024) <https://www.cesr.org/key-concepts-climate-finance-reparations-and-human-rights/> accessed 13 December 2025
- Charlesworth H, Separate Opinion, *Obligations of States in Respect of Climate Change*, Advisory Opinion, 2025 ICJ Rep 1
- Getzel B and Robertson M, 'Will the World Bank Make Good on the Loss and Damage Fund?' (ODI: Think Change, 8 December 2023) <https://odi.org/en/insights/will-the-world-bank-make-good-on-the-loss-and->

[damage-fund/](#) accessed 22 December 2025

Heinrich Böll Stiftung, 'Fund for Responding to Loss and Damage - Climate Funds Update' (13 May 2025) <https://climatefundsupdate.org/wp-content/uploads/2025/03/CFF13-2025-ENG-FRLD-DIGITAL.pdf> accessed 22 December 2025

International Institute for Environment and Development, 'Grants for Developing Nations to Address Climate Change Outweighed Two to One by New Debt' (7 September 2023) <https://www.iied.org/grants-for-developing-nations-address-climate-change-outweighed-two-one-new-debt> accessed 12 December 2025

International Law Commission, 'Articles on Responsibility of States for Internationally Wrongful Acts, with Commentaries' (2001) II(2) *Yearbook of the International Law Commission* 26, UN Doc A/56/10

International Law Commission, 'Draft Articles on Responsibility of States for Internationally Wrongful Acts' in Report of the International Law Commission on the Work of Its Fifty-Third Session, UN GAOR, 56th Sess, Supp No 10, UN Doc A/56/10 (2001)

Intergovernmental Panel on Climate Change, *Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Shukla PR and others eds, CUP 2022)

New Climate Institute, *The Challenges of Assessing "Collective Progress": Design Options for an Effective Global Stocktake Process Under the UNFCCC* (Climate Change 28/2021, 29 April 2021) <https://newclimate.org/resources/publications/the-challenges-of-assessing-collective-progress-design-options-for-an> accessed 11 December 2025

Obligations of States in Respect of Climate Change, Advisory Opinion, 2025 ICJ Rep 1

Schalatek L and Richards J-A, 'The Loss and Damage Fund Board: Getting It Right from the Start' (Heinrich Böll Stiftung Washington, DC Office, 18 March 2024) <https://us.boell.org/en/2024/03/18/loss-and-damage-fund-board-getting-it-right-start> accessed 26 December 2025

Sebutinde J, Separate Opinion, *Obligations of States in Respect of Climate Change*, Advisory Opinion, 2025 ICJ Rep 1

UN, 'Report of the United Nations Conference on the Human Environment, Stockholm, 5-16 June 1972' UN Doc A/CONF.48/14/Rev.1 (1973)

UNCTAD, *Trade and Development Report 2021: From Recovery to Resilience – the Development Dimension* (UN 2021)

UNFCCC, 'COP29 UN Climate Conference Agrees to Triple Finance to

Developing Countries, Protecting Lives and Livelihoods' (UNFCCC News, 24 November 2024) <https://unfccc.int/news/cop29-un-climate-conference-agrees-to-triple-finance-to-developing-countries-protecting-lives-and> accessed 12 December 2025

UNICEF, 'Ethiopia Humanitarian Situation Report, 01 November–31 December 2023' (10 January 2024) <https://reliefweb.int/report/ethiopia/unicef-ethiopia-humanitarian-situation-report-no-12-january-december-2023> accessed 26 December 2025

World Bank, 'Debt Burden of Least Developed Countries Continues to Climb to a Record \$744 Billion in 2019' (2020) <https://www.worldbank.org/en/news/press-release/2020/10/12/debt-burden-of-least-developed-countries-continues-to-climb-to-a-record-744-billion-in-2019> accessed 16 December 2025

World Bank, 'Pakistan: Flood Damages and Economic Losses Over USD 30 Billion and Reconstruction Needs Over USD 16 Billion – New Assessment' (Press Release, 28 October 2022) <https://www.worldbank.org/en/news/press-release/2022/10/28/pakistan-flood-damages-and-economic-losses-over-usd-30-billion-and-reconstruction-needs-over-usd-16-billion-new-assessme> accessed 14 December 2025

Xue H, Separate Opinion, *Obligations of States in Respect of Climate Change*, Advisory Opinion, 2025 ICJ Rep 1

Blogs

Kaplan A, 'Is the Loss and Damage Fund All That It Promises to Be? Examining Some of the Fund's Shortcomings and Putting Things into Perspective after COP 28' (University of Bristol Law School Blog, March 2024) <https://legalresearch.blogs.bris.ac.uk/2024/03/is-the-loss-and-damage-fund-all-that-it-promises-to-be-examining-some-of-the-funds-shortcomings-and-putting-things-into-perspective-after-cop-28/> accessed 10 December 2025

Voigt C, 'Doing the Utmost: Due Diligence as the Standard of Conduct in International Climate Law' (Verfassungsblog, 3 September 2025) <https://blogs.law.columbia.edu/climatechange/2025/09/03/doing-the-utmost-due-diligence-as-the-standard-of-conduct-in-international-climate-law/> accessed 26 December 2025

Online Sources

Alayza N and Larsen G, 'How to Reach \$300 Billion – and the Full \$1.3 Trillion – Under the New Climate Finance Goal' (WRI Insights, 20 February 2025) <https://www.wri.org/insights/ncqg-climate-finance-goals->

[explained?campaign=752614](#) accessed 26 December 2025

Burke S and others, 'How Floods in Pakistan Threaten Global Security' (World Resources Institute, 14 February 2023) <https://www.wri.org/insights/pakistan-floods-threaten-global-security> accessed 24 December 2025

CHN Staff, 'COP29 Bulletin Day 9: Developing Nations Deride "\$200bn" Finance Rumour' (Climate Home News, 20 November 2024) <https://www.climatechangenews.com/2024/11/20/cop29-bulletin-day-9-developing-nations-draw-super-red-line-on-climate-finance-goal/> accessed 26 December 2025

Council on Foreign Relations, 'Timeline: Oil Dependence and U.S. Foreign Policy' (2025) <https://www.cfr.org/timeline/oil-dependence-and-us-foreign-policy> accessed 12 December 2025

European Commission, 'Joint Research Centre Data Catalogue - Emissions Database for Global Atmospheric Research' (30 September 2025) <https://data.jrc.ec.europa.eu/collection/EDGAR> accessed 24 December 2025

Hernández D and Ritchie H, 'Which Countries Have Contributed the Most to Historical CO₂ Emissions?' (Our World in Data, 2025) <https://ourworldindata.org/data-insights/which-countries-have-contributed-the-most-to-historical-co-emissions#:~:text=March%2016%2C%202025-Which%20countries%20have%20contributed%20the%20most%20to%20historical%20CO%2E%82%82%20emissions,followed%20by%20China%20and%20Russia.> accessed 26 December 2025

Jessop S and others, 'EXCLUSIVE COP27: IMF Chief Says \$75/Ton Carbon Price Needed by 2030' (Reuters, 7 November 2022) <https://www.reuters.com/business/cop/exclusive-cop27-imf-chief-says-75ton-carbon-price-needed-by-2030-2022-11-07/> accessed 15 December 2025

Martinez J, 'Great Smog of London | 1952, Cause, Deaths, & Facts' (Britannica, 2025) <https://www.britannica.com/event/Great-Smog-of-London> accessed 26 December 2025

Mathiesen K, 'Climate Change and Poverty: Why Indira Gandhi's Speech Matters' (The Guardian, 6 May 2014) <https://www.theguardian.com/global-development-professionals-network/2014/may/06/indira-gandhi-india-climate-change> accessed 14 December 2025

Picolotti R and Miller A, 'Debt-for-Climate Swaps Can Help Developing Countries Make a Green Recovery' (Climate Home News, 5 November 2020) <https://www.climatechangenews.com/2020/11/05/debt-climate-swaps-can-help-developing-countries-make-green-recovery/> accessed 28 December 2025

Rio Declaration on Environment and Development (adopted 14 June 1992, UN Doc A/CONF.151/26 (Vol I)) Principle 16

Ritchie H and Roser M, 'Coal Power Has Effectively Died in the United Kingdom: The Death of UK Coal in Five Charts' (Our World in Data, 28 January 2019) <http://ourworldindata.org/data-insights/coal-power-has-effectively-died-in-the-united-kingdom> accessed 13 December 2025

Ritchie H and Roser M, 'United States: CO₂ Country Profile' (Our World in Data, Oxford University 2025) <https://ourworldindata.org/co2-emissions> accessed 11 December 2025

Rony PA, "'Our Futures Are Being Stolen!' Youth Activists Tell COP27 Negotiators It's Past Time to Tackle 'Loss and Damage.'" (UN News, 10 November 2022) <https://news.un.org/en/story/2022/11/1130422> accessed 15 December 2025

Savvidou G and Canales N, 'Three Major Gaps in Climate-Adaptation Finance for Developing Countries' (SEI, 10 November 2023) <https://www.sei.org/perspectives/three-major-gaps-in-climate-adaptation-finance-for-developing-countries/> accessed 20 December 2025

Schalatek L, 'Fund for Responding to Loss and Damage' (2025) <https://climatefundsupdate.org/the-funds/fund-for-responding-to-loss-and-damage/> accessed 10 December 2025

Singh N, 'Climate Justice in the Global South: Understanding the Environmental Legacy of Colonialism' (E-International Relations, 2 February 2023) <https://www.e-ir.info/2023/02/02/climate-justice-in-the-global-south-understanding-the-environmental-legacy-of-colonialism/> accessed 24 December 2025

UN, 'United Nations Conference on the Environment, Stockholm 1972' (16 June 1972) <http://un.org/en/conferences/environment/stockholm1972> accessed 26 December 2025

Vigna L, 'Climate Watch (CAIT): Country Greenhouse Gas Emissions Data' (World Resources Institute, 2025) <https://www.wri.org/data/climate-watch-cait-country-greenhouse-gas-emissions-data?campaign=752614> accessed 23 December 2025

Williams J, 'Why Climate Change Is Inherently Racist' (BBC Future, 26 January 2022) <https://www.bbc.com/future/article/20220125-why-climate-change-is-inherently-racist> accessed 26 December 2025

Williams J, 'Why Climate Change Is Inherently Racist' (BBC Future, 2022) <www.bbc.com/future/article/20220125-why-climate-change-is-inherently-racist> accessed 11 December 2025

World Resources Institute, 'NCQG Deep Dive: How We Reach \$300 Billion – and the Full \$1.3 Trillion – Under the New Climate Finance Goal' (WRI Insights, 20 February 2025) <https://www.wri.org/insights/ncqg-climate-finance-goals->

The Economics of Loss and Damage: Financing Climate Reparations in the Global South: Joshua Kipyego Fwamba & Younggreen Peter Mudeyi (2026) *Journal of cmsd* Volume 13(1)

[explained](#) accessed 12 December 2025

World's Youth for Climate Justice, 'World's Youth for Climate Justice' (12 July 2025) <https://www.wy4cj.org/> accessed 14 December 202

