

An exposition of Africa's regional environmental laws, policies and systems for safeguarding the human rights to a clean, healthy and secured environment

Jennifer Heaven Mike*

<https://orcid.org/0000-0002-1716-9158>

ABSTRACT: In Africa, there has been a growing concern about the high rate of environmental degradation and the consequential effect on the ecosystem. The environmental issues in African range from climate change; air, water and soil pollution; harmful mining and extractive activities; biodiversity and land degradation; deforestation; and adverse agricultural practices. In terms of governance, several measures have been undertaken at the regional level to conserve the environment and respond to some of these most critical challenges. The creation of regional environmental treaties, initiatives and institutions in Africa has ushered in significant milestones in the development of the African regional environmental governance framework. These treaties, organisations and policy strategies have played a crucial role in shaping the region's environmental governance. The establishment of these frameworks has fostered cooperation among African countries in addressing environmental challenges at the regional level. It has further provided a platform for the exchange of knowledge, best practices and resources, as well as paved the way for judicial environmentalism. This article examines some of these legal instruments and governance frameworks in place and also highlight their strengths and weaknesses. It indicates other areas of improvement for maximum effectiveness and management. The analysis also reveals that while there are some mechanisms in place to address certain environmental issues, gaps exist in the enforcement and implementation of these regulations and policies.

TITRE ET RÉSUMÉ EN FRANÇAIS

Aperçu des cadres législatifs, politiques et institutionnels environnementaux en Afrique : une approche pour la protection des droits humains à un environnement propre, sain et sécurisé

RÉSUMÉ: Le taux alarmant de dégradation de l'environnement en Afrique et ses impacts sur les écosystèmes soulèvent des préoccupations croissantes. Les défis environnementaux auxquels le continent est confronté incluent le changement climatique, la pollution de l'air, de l'eau et des sols, les activités minières et extractives préjudiciables, la perte de biodiversité, la déforestation et la dégradation des sols due à des pratiques agricoles inappropriées. Sur le plan de la gouvernance, des initiatives significatives ont été entreprises au niveau régional pour préserver l'environnement et relever les défis qui y sont associés. La création de traités, d'initiatives et d'institutions environnementales africaines a constitué une étape clé dans le renforcement du cadre régional de gouvernance environnementale. Ces instruments juridiques et politiques ont joué un rôle essentiel dans l'élaboration de normes régionales et dans la promotion de la coopération interétatique pour faire face aux crises environnementales. En outre, ces mécanismes ont permis l'échange de connaissances, de pratiques exemplaires et de ressources, tout en ouvrant la voie à un recours accru à

* PhD (Exeter), LLM (London) Global Studies Scholar, DePauw University Indiana; Assistant Professor of Law, AUN; jennifer2heaven@yahoo.com; jennifer.mike@aun.edu.ng

l'environnementalisme judiciaire. Cette étude examine un ensemble d'instruments juridiques et de cadres institutionnels existants, en mettant en lumière leurs forces et faiblesses. Elle identifie également des domaines nécessitant des améliorations pour optimiser leur efficacité et leur mise en œuvre. L'analyse révèle que, bien que des mécanismes existent pour aborder certaines questions environnementales, des lacunes subsistent en matière d'application et de mise en œuvre. L'amélioration de ces cadres juridiques et politiques reste essentielle pour garantir une protection durable des droits humains à un environnement propre, sain et sécurisé.

KEY WORDS: human rights; environmental rights; judicial environmentalism; multilateral environmental agreements; climate change; biodiversity

CONTENT:

1	Introduction.....	276
2	Conceptual foundation and framework: right to environmental protection, conservation and management.....	278
2.1	African Charter on Human and Peoples' Rights.....	280
3	Supporting the right to a decent, clean, and healthy environment: African regional environmental treaties and policies.....	282
3.1	Climate change.....	282
3.2	Waste management and control.....	290
3.3	Biodiversity loss.....	297
4	Enforcing compliance to existing frameworks and guaranteeing environmental justice.....	302
5	Conclusion: prospects for Africa's environmental control system.....	306

1 INTRODUCTION

The environment is nature's greatest gift to mankind. It provides many resources vital to human health, prosperity and living a good life.¹ Protecting the environment, therefore, is an imperative means to human survival and development. In recent times, however, environmental issues in Africa have highlighted the need to be more deliberate about conserving the environment and mitigating environmental degradation.

African societies are increasingly facing severe repercussions due to the failure to adequately and effectively manage the environment.² These challenges are exacerbated by a notable lack of accountability in environmental evaluation and monitoring processes, which fails to ensure that natural resources are being used sustainably and responsibly.³ Many communities, especially in urban areas, are

- 1 M Falayi, J Gambiza & M Schoon 'A scoping review of environmental governance challenges in Southern Africa from 2010 to 2020' (2021) 48 *Environmental Conservation* 235-243.
- 2 A Ayanlade and others 'Extreme climate events in sub-Saharan Africa: a call for improving agricultural technology transfer to enhance adaptive capacity' (2022) 27 *Climate Services* 100311; World Bank *Sub-Saharan Africa: from crisis to sustainable development: a long term perspective study* (1989).
- 3 Falayi and others (n 1); L Yang, S Bashiru Danwana & FY Issahaku 'Achieving environmental sustainability in Africa: the role of renewable energy consumption, natural resources, and government effectiveness: evidence from symmetric and asymmetric ARDL models' (2022) 19 *International Journal of Environmental Research and Public Health* 8038.

grappling with a rise in air pollution levels, driven by industrial emissions, vehicular traffic and inadequate waste disposal practices.⁴

Public participation in disaster risk reduction initiatives remains alarmingly limited, preventing communities from voicing their concerns and contributing to solutions that could mitigate risks and enhance resilience.⁵ Compounding these issues, many regions are witnessing a critical shortage of clean water resources which, coupled with rising food insecurity, low agricultural productivity and climate change, threatens livelihoods and overall stability.⁶ The loss of biodiversity is another pressing concern, as habitats are destroyed and species face extinction due to human activities or neglect.⁷

While the foregoing concerns are shared by many regions around the world, in Africa, desertification, exacerbated by deforestation, is a distinct major challenge, especially in the Sahel region of Africa.⁸ Relentless deforestation and desertification exacerbate land degradation, reducing arable land and impacting agricultural productivity.⁹ To add to these, poor waste management practices lead to environmental pollution and health risks, creating further obstacles in the fight for sustainable development in the region.¹⁰ Addressing these environmental issues is crucial for sustainable development and the health of both people and ecosystems in Africa.

African regional environmental law, policies and initiatives can play a vital role in addressing these environmental challenges on the African continent.¹¹ The importance of the regional treaties lies in the ability to provide a legal framework for addressing pressing environmental problems at the continental and national levels. By promoting sustainable development, incorporating key environmental principles and facilitating environmental governance, several treaties, initiatives and strategic policies ensure the preservation of Africa's natural resources and ecosystems for the current and future generations to come. Beyond establishing standards, many multilateral environmental agreements (MEAs) promote regional cooperation, ensuring that African countries can pool their resources, share

4 AL Mabogunje 'The environmental challenges in sub-Saharan Africa' (1995) 37 *Environment: Science and Policy for Sustainable Development* 4.

5 Z Nkombi & GJ Wentink 'The role of public participation in disaster risk reduction initiatives: the case of Katlehong township' (2022) 14 *Jamba* 1203.

6 Ayanlade and others (n 2).

7 World Bank (n 2).

8 Green Earth 'Desertification – Sahel case study' 20 January 2022, <https://www.green.earth/blog/desertification-sahel-case-study> (accessed 30 October 2024); FOA 'The magnitude of the problem', <https://www.fao.org/4/x5318e/x5318e02.htm> (accessed 30 October 2024).

9 MAE AbdelRahman 'An overview of land degradation, desertification and sustainable land management using GIS and remote sensing applications' (2023) 34 *Rendiconti Lincei* 767-808.

10 Z Zhang and others 'Municipal solid waste management challenges in developing regions: a comprehensive review and future perspectives for Asia and Africa' (2024) 930 *Science of the Total Environment* 172794.

11 World Bank *Enhancing the climate resilience of Africa's infrastructure: the power and water sectors* (2015).

knowledge and expertise and develop coordinated strategies to tackle these challenges.

Establishing institutions such as the African Union (AU), the African Ministerial Conference on the Environment and regional economic communities (RECs), further strengthens the governance and enforcement of environmental regulations. Environmental rights in the African Charter on Human and Peoples' Rights (African Charter) are available to guarantee individuals and communities the right to a clean and healthy environment, access to environmental justice and the opportunity to participate in decision-making processes. Furthermore, the right to the environment underscores the moral and legal obligation to safeguard natural resources for current and future generations. The African Court on Human and Peoples' Rights (African Court) and other robust regional judicial institutions and their case law also add impetus to the framework for environmental protection in Africa.

Despite the availability of robust regulations, the challenges to the environment persist and the implementation by nations vary widely.¹² This article provides a critical overview of the regional legal system for environmental protection and outlines their importance in securing human rights. The exploration also identifies the current legal and policy landscape with respect to the effectiveness in addressing its thematic environmental issues. Furthermore, the examination is made with the view to identifying the challenges to implementation and enforcement. It concludes by discussing the future prospects of African regional environmental law in addressing emerging and prevailing environmental issues. In general, this analysis serves to set the stage for effective implementation by the relevant bodies.

2 CONCEPTUAL FOUNDATION AND FRAMEWORK: RIGHT TO ENVIRONMENTAL PROTECTION, CONSERVATION AND MANAGEMENT

The recognition of the right to environmental protection, conservation and management has gained significant momentum in recent years, emerging as a fundamental component for ensuring the well-being of both individuals and the planet as a whole.¹³ A growing body of international human rights treaties and declarations now explicitly acknowledges the right to a healthy environment, which provides a

12 K Ambalam 'Challenges of compliance with multilateral environmental agreements: the case of the United Nations Convention to Combat Desertification in Africa' (2014) 5 *Journal of Sustainable Development Studies* 145.

13 JR May 'The case for environmental human rights: recognition, implementation, and outcomes' (2024) 42 *Cardozo Law Review* 983; E Cima 'The right to a healthy environment: reconceptualising human rights in the face of climate change' (2022) 31 *Review of European, Comparative and International Environmental Law* 38.

crucial legal framework for advocating robust environmental protections and promoting more comprehensive policies.¹⁴

Adopting a human rights perspective in environmental protection is essential for a multitude of reasons. First and foremost, a human rights lens promotes the concept of sustainable development, which emphasises the necessity of achieving economic growth without compromising human dignity or causing undue harm to the environment.¹⁵ This approach ensures that the benefits of economic advancement are equitably distributed and encourages careful consideration of the long-term impacts of harmful human activities and resource extraction, and environmental degradation on vulnerable communities.

Second, protecting the environment is fundamentally linked to human rights, as a healthy environment is essential for the realisation of numerous rights, including the rights to life, health, food, water and an adequate standard of living.¹⁶ Reports indicate that environmental degradation and climate change disproportionately affect marginalised communities, leading to increased vulnerability and exacerbated social inequalities.¹⁷ Thus, ensuring environmental protection fosters social justice, empowers communities and supports the realisation of human dignity, making it a critical element of the broader human rights agenda.

Moreover, addressing environmental issues through a human rights framework establishes a solid legal basis for holding states, individuals and corporations accountable for their actions.¹⁸ By integrating human rights principles into environmental law and policy, it becomes possible to enhance accountability for environmental harms. This shift fosters a culture of responsibility, whereby states and corporations can be held liable for violations that adversely affect both the environment and human rights. Consequently, protecting the environment becomes an imperative, not only for the sake of ecological integrity but also as a means of upholding and enhancing human rights.

In the context of the African continent, the right to a healthy, clean and safe environment is explicitly recognised in the African Charter on Human and Peoples' Rights (African Charter).¹⁹

14 As above.

15 AJ van Niekerk 'Inclusive economic sustainability: SDGs and global inequality' (2020) 12 *Sustainability* 5427; OHCHR 'Understanding human rights and climate change' Submission of the Office of the High Commissioner for Human Rights to the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change, <https://www.ohchr.org/sites/default/files/Documents/Issues/ClimateChange/COP21.pdf> (accessed 30 October 2024).

16 As above.

17 UN Report: Inequalities exacerbate climate impacts on poor, <https://www.un.org/sustainabledevelopment/blog/2016/10/report-inequalities-exacerbate-climate-impacts-on-poor/> (accessed 30 October 2024).

18 OO Salazar-Duran 'A human rights approach to corporate accountability and environmental litigation' (2009) 43 *University of San Francisco Law Review* 733.

19 African Charter on Human and Peoples' Rights adopted 27 June 1981, entered into force 21 October 1986 21 ILM 58 art 24 (African Charter).

2.1 African Charter on Human and Peoples' Rights

The African Charter is a legal instrument designed to cater to human rights in the African region. The Charter recognises the importance of integrating environmental concerns into development plans and strengthening environmental governance and institutions. This legal acknowledgment lays a critical foundation for a concerted and comprehensive approach to addressing environmental issues as integral to the protection of human rights. It also promotes sustainable consumption and production patterns. By framing environmental concerns as human rights issues, stakeholders can better advocate necessary changes that prioritise both ecological sustainability and respect for human dignity, ultimately contributing to a more equitable and just world for all. The African Charter contains various provisions aimed at environmental protection in Africa,²⁰ including the right to a clean and healthy environment,²¹ the protection of biodiversity and ecosystems²² and the sustainable use of natural resources.²³

2.1.1 *Right to a decent, clean and healthy environment*

The African Charter emphasises the right to a decent, clean and healthy environment in Article 24 as follows: 'All peoples shall have the right to a general satisfactory environment favourable to their development.'²⁴ Scholars agree that this right recognises the importance of safeguarding a clean, safe, decent and healthy environment for the well-being of individuals and communities.²⁵ A distinctive aspect of this proviso is its tripartite angle – it incorporates the protection of individuals' rights in relation to their environment, the protection of collective and community rights, and the conservation of the environment itself. In this manner, it highlights the need for measures to prevent pollution, promote sustainable development and protect ecosystems. This provision in the African Charter also emphasises the responsibility of governments to respect, protect, fulfil and ensure the enjoyment of this right by their citizens. By recognising the importance of a decent, clean and healthy environment, the African Charter sets the foundation for environmental protection initiatives in Africa.

The right to environment is significantly linked to the right to health. The African Charter provides in article 16 that 'every individual shall have the right to enjoy the best attainable state of physical and mental health'. Furthermore, 'state parties to the present Charter shall

20 JH Knox & R Pejan *Human rights and the environment under African Union law* (2028) 62-77.

21 Arts 24 & 16 African Charter.

22 Art 24 African Charter.

23 Art 21 African Charter.

24 KSA Ebeku 'The right to a satisfactory environment and the African Commission' (2003) 3 *African Human Rights Law Journal* 149.

25 D Shelton 'Human rights, environmental rights and the right to environment' (1991) 28 *Stanford Journal of International Law* 103-138.

take the necessary measures to protect the health of their people'. This progressive link between health and the environment has been recognised by the African Commission on Human and Peoples' Rights (African Commission) in *SERAC*²⁶ regarding Shell Oil's exploration activities in the Niger Delta. The plaintiffs argued that the oil exploration activities of Shell, under the licence given by Nigerian authorities, disregarded the safety of local communities and violated the rights of the Niger Deltans. The plaintiffs argue that Shell's activities have led to severe environmental degradation and health issues in the region, violating both national and international laws, particularly articles 16 and 24 of the African Charter. Additionally, they claim that the Nigerian government failed to enforce regulations and protect its citizens. The African Commission ruled in favour of SERAC, holding Shell accountable for its negligence and failure to implement safety measures, as well as implicating the Nigerian government in its complicity. While recognising the Nigerian state's right to extract oil, it also made clear that the government had not taken the necessary precautions to guarantee sustainable development and the defence of the environmental and human rights of the region's native population, particularly the Ogoni people. As a result, the Commission determined that the Nigerian state had violated articles 16 and 24 of the African Charter regarding the right to a clean and healthy environment.

The verdict has set a crucial legal precedence that impact future cases involving environmental activism. Furthermore, it prompted compensation and remediation efforts for the affected communities, along with changes in Shell's operations and corporate social responsibility policies. Importantly, the verdict and its implications mark a crucial turning point in the fight for environmental rights as supported by the provisions of the African Charter.

Gbemre v Shell Petroleum Development Company Nigeria Limited & Others is another landmark case on the right to environmental protection and health.²⁷ The applicants argued that they have a right to 'enjoy the best attainable state of physical and mental health as well as a right to a general satisfactory environment favourable to their development'. Accordingly, the degradation of the environment by the respondents violated these human rights. In this case, the judge ruled in favour of the applicants' argument and the environmental and health rights of the affected communities.

26 *Social and Economic Rights Action Centre (SERAC) & Another v Nigeria* (2001) AHRC 60 (ACHPR 2001) (*SERAC*).

27 (2005) AHRLR 151 (NgHC 2005) para 62.

3 SUPPORTING THE RIGHT TO A DECENT, CLEAN, AND HEALTHY ENVIRONMENT: AFRICAN REGIONAL ENVIRONMENTAL TREATIES AND POLICIES

Although not explicitly stated, various regional instruments, plans of action and MEAs support environmental rights and the accompanying duties regarding these rights. They establish frameworks that further the objective of the environmental rights as stated in the African Charter. The availability of regional environmental treaties reflects the pressing challenges and present opportunities for environmental management, conservation and protection for sustainable development.²⁸ Importantly, they provide a framework for cooperation and the implementation of measures to protect the environment.²⁹ These treaties also serve as gripping reminders of the shared ambition and commitment of African nations to drive a concerted mission towards facilitating sustainable development in Africa and ultimately contribute to the Sustainable Development Goals (SDGs).

The next part will examine the available treaties, frameworks and policies with respect to a range of issues, including climate change, waste management and biodiversity conservation.

3.1 Climate change

Africa is not immune to some of the consequences of climate change raging across the world.³⁰ The repercussions of climatic shifts are multifaceted, affecting essential elements such as food security, water availability, public health and overall economic stability.³¹ Rising temperatures, coupled with shifting precipitation patterns, are leading to more frequent and intense droughts and floods.³² Some regions are experiencing extreme dryness, while others face the threat of

28 African Union 'Multilateral Environmental Agreements (MEAs)', <https://au.int/en/meas#:~:text=History%20of%20MEAs%20in%20Africa&text=The%20Convention%20among%20other%20issues,social%20development%20policies%20and%20programmes> (accessed 30 October 2024).

29 NJ Vig 'Introduction: governing the international environment' in NJ Vig & RS Axelrod (eds) *The global environment: institutions, law and policy* (1999) 1-26.

30 World Meteorological Organisation 'Africa suffers disproportionately from climate change' 4 September 2023, <https://wmo.int/media/news/africa-suffers-disproportionately-from-climate-changes> (accessed 30 October 2024).

31 RW Abrams, JF Abrams & A L Abrams 'Climate change challenges for Africa' in *Encyclopedia of the anthropocene 2: reference module in earth systems and environmental sciences* (2018) 177-194; AR Chapman & AK Ahmed 'Climate justice, human rights, and the case for reparations' (2021) 23 *Health and Human Rights Journal* 81.

32 As above.

flooding.³³ Literature also shows that one of the most alarming consequences of this is the disruption of agricultural productivity, which is vital for many African economies.³⁴ For example, prolonged dry spells can decimate crops, while sudden heavy rains can cause soil erosion and the destruction of harvests, leaving farmers without livelihoods and communities without food.³⁵ This agricultural instability not only threatens the immediate food supply but also contributes to rising food prices, escalating malnutrition and food scarcity, particularly among vulnerable populations.³⁶

Water resources are also under severe strain as climate change alters rain patterns and increases evaporation rates.³⁷ This inconsistent availability of water affects not only agriculture and livestock productivity, but also drinking water supplies and sanitation, further jeopardising lives and public health.³⁸ Increased water scarcity can give rise to a reliance on unsafe water sources, leading to waterborne diseases, compounding health challenges and placing additional strain on already overburdened healthcare systems.³⁹

Moreover, the effects of climate change are driving climate-induced displacement, as communities are forced to leave their homes in search of better living conditions and resources.⁴⁰ This migration places additional pressure on urban areas and neighbouring regions, often resulting in conflict over limited resources and escalating social tensions.⁴¹ Successive assessment reports from the Intergovernmental Panel on Climate Change (IPCC) have highlighted a pressing concern: the interplay between climate change and population growth is

- 33 H Chikoore & MR Jury 'South African drought, deconstructed' (2021) 33 *Weather Climate Extremes* 100334; W Thoithi, RC Blamey & CJC Reason 'Dry spells, wet days, and their trends across Southern Africa during the summer rainy season' (2021) 48 *Geophysical Research Letters* e2020GL091041.
- 34 MB Sylla and others 'Climate change to severely impact West African basin scale irrigation in 2°C and 1.5°C global warming scenarios' (2018) 8 *Scientific Reports* 14395; A Dai 'Drought under global warming: a review' (2011) 2 *Advanced Review* 45e65.
- 35 AJ Dietz, R Ruben & A Verhagen (eds) 'The impact of climate change on drylands with a focus on West Africa' (2001) NOP-ICCD Research Project 952240.
- 36 African Union 'Climate change and resilient development strategy and action plan' (2022-2032), https://au.int/sites/default/files/documents/41959-doc-CC_Strategy_and_Action_Plan_2022-2032_08_02_23_Single_Print_Ready.pdf (accessed 30 October 2024).
- 37 Sylla and others (n 34); TD Bhaga and others 'Impacts of climate variability and drought on surface water resources in sub-Saharan Africa using remote sensing: a review' (2020) 12 *Remote Sensing* 4184.
- 38 M Hyland & J Russ 'Water as destiny – the long-term impacts of drought in sub-Saharan Africa' (2019) 115 *World Development* 30-45.
- 39 As above; Ayanlade (n 2).
- 40 S Adaawen and others 'Drought, migration, and conflict in sub-Saharan Africa: what are the links and policy options?' (2019) 2 *Current Directions in Water Scarcity Research* 15-31.
- 41 As above; CS Hendrix & SM Glaser 'Trends and triggers: climate, climate change and civil conflict in sub-Saharan Africa' (2007) 26 *Political Geography* 695-715.

expected to significantly exacerbate the deterioration of our natural resources.⁴²

3.1.1 Legal and policy interventionsles

Although there is no regional MEA for climate change *per se*, some countries have enacted specific laws addressing climate change, often aligned with regional environmental objectives and international commitments.⁴³ These laws typically cover emissions reductions, adaptation and mitigation measures, renewable energy and sustainable land use. In Nigeria, for example, the Climate Change Act of 2021 serves as a binding legal framework for the country to address climate-related issues.⁴⁴ Fifty-four countries in Africa have ratified the Paris Agreement (and Kyoto Protocol) and are working to meet their nationally-determined contributions (NDCs) under the Paris Agreement, which outlines individual climate action plans and commitments.⁴⁵ Many countries have also taken steps to submit their national adaptation plans (NAPs) as part of their commitments to reduce emissions and adapt to climate change.⁴⁶

At the continental level, Agenda 2063 is a framework that emphasises sustainable development and environmental resilience.⁴⁷ It aims to address climate change as a key obstacle to achieving development goals.⁴⁸

The Africa Climate Change Strategy 2020-2030 represents a critical and comprehensive continent-wide policy framework designed to address the multifaceted challenges posed by climate change across

42 IPCC 'Climate change 2013: the physical science basis' in TF Stocker and others (eds) *Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (2013); Intergovernmental Panel on Climate Change (IPCC) 'Climate change 2001: impacts, adaptation and vulnerability' in JJ McCarthy and others (eds) *Contribution of Working Group II to the Third Assessment Report of the Intergovernmental Panel on Climate Change* (2001) 1032.

43 J Setzer & C Higham 'Global trends in climate change litigation: 2023 snapshot' (2023) London: Grantham Research Institute on Climate Change and the Environment and Centre for Climate Change Economics and Policy, London School of Economics and Political Science.

44 Grantham Research Institute 'Nigeria's Climate Change Act', https://climate-laws.org/document/nigeria-s-climate-change-act_5ef7 (accessed 30 October 2024).

45 USAID 'USAID announces new partnership with African Union Commission to reach Paris Agreement Goals in Africa', <https://www.usaid.gov/press-release/usaaid-announces-new-partnership-african-union-commission-reach-paris-agreement-goals-africa> (accessed 30 October 2024).

46 As above.

47 African Union 'Agenda 2063: The Africa we want', <https://au.int/en/agenda2063/overview> (accessed 30 October 2024).

48 As above.

the African continent.⁴⁹ This strategy acts as a strategic roadmap to effectively combat climate change through a combination of adaptation, mitigation, early warning systems and resilient development strategies. A vital aspect of the strategy is its call for the strengthening and expansion of national meteorological and hydrological services. This enhancement is necessary to ensure that these services can provide timely and accurate weather forecasts as well as effective early warning systems for extreme weather events, including floods, droughts and heatwaves, experienced across the continent. It prioritises equitable access to financial resources, facilitates technology transfer, and emphasises regional collaboration to build resilience against the increasingly severe threats posed by climate change.⁵⁰ Furthermore, it seeks to leverage Africa's unique natural assets to promote sustainable economic growth.

Another cornerstone of the strategy is the promotion of climate-resilient infrastructure. Countries in the African region are urged to prioritise investments in the development of resilient infrastructure, which includes essential components such as advanced water management systems, sustainable agricultural practices and comprehensive disaster risk reduction measures. These initiatives must be specifically tailored to address local climate vulnerabilities, ensuring that each country can effectively respond to its unique challenges.

In addition, the strategy emphasises the importance of sustainable land use practices. It advocates practices such as agroforestry, reforestation and sustainable grazing to protect ecosystems and enhance carbon sequestration efforts. The strategy also outlines an acceleration of efforts focused on adopting renewable energy sources such as solar, wind and geothermal power. This transition is to be supported through policy incentives, capacity-building initiatives and investments in clean energy technologies. Furthermore, the implementation of energy-efficiency measures across various sectors – including building construction, transportation, and industry – is prioritised to mitigate energy consumption and reduce greenhouse gas emissions.

In a significant milestone for climate action on the continent, the African Union (AU) Heads of State and Government formally adopted the African Union Climate Change and Resilient Development Strategy and Action Plan for the period from 2022 to 2032 in February 2022.⁵¹ This landmark achievement establishes a foundational basis for

49 Draft African Union strategy on climate change AMCEN-15-REF-11. Addis Ababa: African Union, https://archive.uneca.org/sites/default/files/uploaded-documents/ACPC/2020/africa_climate_change_strategy_-_revised_draft_16.10.2020.pdf, African Union Climate Change And Resilient Development Strategy and Action Plan (2022-2032) https://au.int/sites/default/files/documents/41959-doc-CC_Strategy_and_Action_Plan_2022-2032_08_02_23_Single_Print_Ready.pdf (accessed 30 October 2024).

50 African Union Draft Africa Climate Change Strategy 2020-2030.

51 African Union 'African Union Climate Change and Resilient Development Strategy and Action Plan (2022-2032)', https://au.int/sites/default/files/documents/41959-doc-CC_Strategy_and_Action_Plan_2022-2032_08_02_23_Single_Print_Ready.pdf (accessed 30 October 2024).

coordinated climate action at the continental level.⁵² It provides a comprehensive framework within which African countries and communities can pursue a unified climate change agenda and resilience development strategy. The plan aims to foster partnerships among countries and stakeholders, while rallying support for its effective implementation, thus bolstering Africa's collective response to one of the most pressing challenges.

The African Union Green Recovery Action Plan 2021-2027 also aims to 'tackle the combined challenges of the COVID-19 recovery and climate change, by focusing on critical areas, including climate finance, renewable energy, resilient agriculture, resilient cities, land use and biodiversity'.⁵³

Another important regional climate change initiative is the Kampala Ministerial Declaration on Migration, Environment, and Climate Change (KDMECC-AFRICA), which was adopted in 2021.⁵⁴ This Declaration is particularly noteworthy as it specifically addresses the complex interplay between migration, environmental degradation and climate change across the African continent. It aims to foster an integrated approach and establish an action-oriented framework that deals with human mobility driven by climate change and environmental factors. A key aspect of the KDMECC-AFRICA is its emphasis on human rights, advocating the protection of the rights of migrants impacted by environmental and climate-related issues. This focus on human rights underscores the necessity of recognising and upholding the dignity and rights of all individuals, irrespective of their migration status. The Declaration highlights the fact that environmental degradation and the adverse effects of climate change are substantial contributors to migration and displacement in Africa. Therefore, it calls for a comprehensive and cohesive strategy to tackle these intertwined challenges.

An essential component of the Declaration is the call for cross-sectoral approaches and regional cooperation, which is paramount to the successful implementation of all regional instruments and policy agendas. It champions the integration of migration, environmental and climate change policies at both national and regional levels, which is crucial for formulating comprehensive frameworks capable of effectively tackling the multifaceted nature of these issues. Furthermore, it encourages enhanced collaboration among African nations to exchange knowledge, resources and best practices aimed at addressing the challenges posed by climate change and migration.

52 AICCRA 'Africa's new climate change strategy offers a continental roadmap' 18 October 2022, <https://aiccra.cgiar.org/news/africas-new-climate-change-strategy-offers-continental-roadmap> (accessed 30 October 2024).

53 African Union 'Africa Environment and Wangari Maathai Day' 3 March 2023, <https://au.int/en/wangari-maathai-day#:~:text=The%20African%20Union%20Green%20Recovery,cities%2C%20land%20and%20biodiversity>. The Action plan can be found at <https://au.int/en/documents/20210715/african-union-green-recovery-action-plan-2021-2027> (accessed 30 October 2024).

54 IOM 'African countries sign continental agreement to address climate mobility', <https://www.iom.int/news/african-countries-sign-continental-agreement-address-climate-mobility> (accessed 30 October 2024).

While the KDMECC-AFRICA is still in its early stages of implementation, it stands as a critical instrument reinforcing Africa's commitment to engaging in global efforts to combat climate change and address migration concerns.

In addition to the KDMECC-AFRICA, several other initiatives have emerged to bolster adaptation, mitigation and climate control actions in Africa. The Africa Adaptation Initiative (AAI) exemplifies this effort by focusing on the direct impacts of climate change.⁵⁵ Its objectives include enhancing observational infrastructure and early warning systems; supporting the establishment and strengthening of national institutions and policies; implementing specific adaptation projects; and mobilising financial resources and investments. Through the AAI, African national governments are expected to take the lead in implementing initiatives, while a Continental Adaptation Support Unit will be formed to coordinate these efforts and amplify action.

The African Agriculture Initiative (AAA), launched at COP22, aims to mitigate Africa's vulnerability to climate change and enhance food security on the continent.⁵⁶ The AAA concentrates on a variety of critical projects, such as improving soil management techniques, enhancing agricultural water control, developing strategies for effective climate risk management, and promoting capacity-building initiatives and funding solutions. Presently, the AAA enjoys active support from 25 African nations, various international organisations, including the United Nations Framework Convention on Climate Change (UNFCCC) and the Food and Agricultural Organisation (FAO), and has potential avenues to significantly contribute to agricultural projects despite confronting various implementation challenges.⁵⁷

Another noteworthy initiative is the Africa Hydromet Programme, which is being implemented in collaboration with the World Bank Group and the World Meteorological Organisation.⁵⁸ This regional framework aims to achieve several critical objectives. First, it focuses on capacity building for meteorological institutions, enhancing the knowledge and skills of these institutions to improve their ability to provide accurate and timely hydrometeorological services. Second, it seeks to strengthen data collection and analysis capabilities, ensuring that reliable and comprehensive information is available for decision making related to weather and climate. Lastly, the initiative aims to enhance forecasting and modelling techniques, thereby advancing the accuracy and reliability of weather and climate predictions essential for effective planning and response.

55 African Development Bank Group *Africa thriving and resilient: the African Development Bank Group's Second Climate Change Action Plan (2016-2020)* (African Development Bank Group) 19.

56 As above.

57 United Nations 'UN, initiative for the adaptation of african agriculture to climate change non-governmental organisation (NGO)', <https://sdgs.un.org/partnerships/initiative-adaptation-african-agriculture-climate-change> (accessed 30 October 2024).

58 World Bank 'Africa Hydromet Programme', https://www.worldbank.org/en/programs/africa_hydromet_program (accessed 30 October 2024).

These initiatives collectively contribute to a robust framework for addressing the multifaceted challenges posed by climate change in Africa, highlighting the continent's proactive commitment to sustainable development and resilience in the face of climate adversity.

To assist member states in lowering the risk of loss and damage from extreme weather events and natural catastrophes, the Agreement for the Establishment of the African Risk Capacity Agency (ARC) was adopted in 2012.⁵⁹ The ARC was also established as a specialised agency of the AU to help member states of the AU to improve their capacities to better plan, prepare and respond to extreme weather events and natural disasters.⁶⁰ The ARC further assists AU member states to reduce the risk of loss and damage caused by extreme weather events and natural disasters affecting Africa's populations by providing targeted responses to disasters in a more timely, cost-effective, objective and transparent manner.⁶¹

Various other strategies, plans of action and sub-regional frameworks are available to address the unique climate change challenges in the continent. For example, the East African Community (EAC) has developed a regional climate change policy, the EAC Climate Change Policy (EACCCP), which focuses on adaptation, mitigation and capacity building among member states.⁶² The Southern African Development Community (SADC) also has a number of regional climate change strategies aimed at enhancing resilience to climate change impacts, particularly in sectors such as agriculture and water management.⁶³

The ECOWAS Strategic Programme on Reducing Vulnerability and Adapting to Climate Change 2020-2030 is a West African-focused strategy to reduce vulnerability to climate change and to build the resilience of affected communities. Similarly, the ECOWAS Environment Policy highlights the need for a comprehensive and coordinated approach to address environmental challenges in the

59 AU *African Union handbook* (2020), https://au.int/sites/default/files/documents/31829-doc-au_handbook_2020_english_web.pdf (accessed 30 October 2024); arts 1 & 2 of the ARC Agreement; N Ngem 'Chapter 15: The Agreement for the Establishment of the African Risk Capacity (ARC) Agency' in N Ngem *An introduction to the African Union environmental treaties* (2023) 92.

60 Art 2 ARC Agreement.

61 Art 3 ARC Agreement.

62 JF Jarso 'The East African Community and the climate change agenda: an inventory of the progress, hurdles, and prospects' (2012) 12 *Sustainable Development Law and Policy* 19.

63 These include the SADC Policy Paper on Climate Change, the SADC Water Sector Climate Change Adaptation Strategy and the Regional Climate Change Programme. See S Munzhezzi 'Climate change adaptation Southern African Development Community (SADC) adaptation scenarios Factsheet Series, Factsheet 1 of 7' Department of Environmental Affairs, Climate Change Branch, https://www.dfe.gov.za/sites/default/files/reports/ltrasfactsheet_perspectiveforSADC.pdf (accessed 30 October 2024).

region.⁶⁴ This policy recognises the importance of sustainable development and the preservation of natural resources. It aims to enhance environmental governance and promote the adoption of environmentally-friendly practices in member states. By establishing clear objectives and goals, as well as key principles and strategies, the policy framework provides a roadmap for effective implementation and monitoring mechanisms. Additionally, this climate strategy for the ECOWAS region emphasises the importance of mitigating and adapting to the impacts of climate change, while also promoting the use of renewable energy sources. The policy is important to the ECOWAS region for several reasons. The ECOWAS region faces significant environmental challenges, including deforestation, land degradation, water scarcity, pollution and loss of biodiversity.⁶⁵ Recognising the importance of addressing these issues, the policy and strategy have been developed to mitigate and adapt to the impacts of climate change in the region in relation to these issues. It also promotes the use of renewable energy as a key solution to reducing greenhouse gas emissions. The policy framework sets objectives and goals and establishes key principles and strategies for implementation. Effective monitoring mechanisms would ensure the successful implementation of this policy.

Organisations, projects and institutions that contribute to sustainable environmental development and protection in Africa include the African Climate Policy Centre;⁶⁶ The African Climate Foundation;⁶⁷ the ClimDev Special Fund (CDSF);⁶⁸ the Africa Phytosanitary Programme (APP).

While these initiatives, agreements, action plans, strategies and policies are significant in tackling climate change, it is worth noting that they do not create binding obligations on states. Many of these offer policy guidance without a corresponding legal enforcement obligation. The effectiveness is also hindered by the absence of explicit legally-binding provisions to institute actions against individuals and

64 The ECOWAS Regional Climate Strategy and its 2030 Action Plan were formally adopted by the 88th ordinary session of the ECOWAS Council of Statutory Ministers held from 30 June to 1 July 2022 in Accra, Ghana. Directorate of Environment and Natural Resources of ECOWAS *The ECOWAS regional climate strategy and its 2022-2030 action plan* (2022), <https://climatestrategy.ecowas.int> (accessed 30 October 2024).

65 ECOWAS & USAID *ECOWAS Environmental Action Plan 2020-2026* March 2020 (ECOWAS).

66 UNECA 'African Climate Policy Centre', <https://www.uneca.org/acpc> (accessed 30 October 2024).

67 *Africa thriving and resilient: the African Development Bank Group's Second Climate Change Action Plan (2016-2020)* (African Development Bank Group) 19; African Climate Foundation 'Developing, supporting, elevating and catalysing climate action in Africa', <https://africanclimatefoundation.org/#:~:text=The%20African%20Climate%20Foundation%20%7C%20Unlocking%20Green%20Development> (accessed 30 October 2024).

68 African Development Bank Group 'The ClimDev Special Fund (CDSF)', <https://www.afdb.org/en/topics-and-sectors/initiatives-partnerships/climate-for-development-in-africa-climdev-africa-initiative> (accessed 30 October 2024).

organisations that fail to carry out adaption, mitigation or control measures.

Africa's limited infrastructure and financial resources significantly hinder efforts to adapt to these changes and build resilience against climate-related shocks. Many countries struggle to implement effective adaptive strategies due to a lack of investment in technology, infrastructure and education. This creates a cycle of vulnerability from which it is difficult to escape.

Another identifiable challenge lies in the content and nature of these efforts. As noted by Gadani and others, the governments in the African region demonstrate a low to moderate level of commitment to greenhouse gas (GHG) mitigation efforts, with none exhibiting a high level of ambition.⁶⁹ This situation can largely be attributed to their significant vulnerability to climate change impacts, which leads to a stronger emphasis on adaptation strategies rather than aggressive mitigation initiatives.⁷⁰ Furthermore, African countries contribute relatively little to global GHG emissions, which also influences their policy focus.⁷¹

To effectively tackle these challenges, there is a critical need for international cooperation and support. While the Paris Agreement provides a robust framework, there is also a need to have African-oriented and focused MEAs which would take into account the unique challenges that African countries face and the collaborative effort to be undertaken to fight climate change in the region. This system should include the promotion of sustainable development strategies that emphasise the importance of environmental conservation and resilience building. It should emphasise investment in renewable energy sources, such as solar and wind power, which can provide alternative energy solutions while reducing dependence on fossil fuels.

The system should stress the focus and support for climate-smart agricultural practices, which should be tailored to fit the local contexts of different regions, ensuring that farmers have the tools and knowledge necessary to adapt to changing climatic conditions. By addressing these challenges through collaborative efforts and innovative strategies, Africa can work towards a more sustainable and resilient future in the face of ongoing climate change.

3.2 Waste management and control

Environmental waste management in Africa faces a multitude of significant challenges that are largely rooted in the context of rapid urbanisation, inadequate infrastructure and insufficient regulatory

69 G Gadani, I Galarraga & E Sainz de Murieta 'Regional climate change policies: an analysis of commitments, policy instruments and targets' SEEDS Working Paper 5/2020 (2020).

70 As above.

71 As above.

frameworks.⁷² As cities expand at an unprecedented rate, many urban areas are increasingly burdened by inefficient waste collection and disposal systems. This inefficiency often leads to the accumulation of solid waste in public spaces, such as streets and waterways, creating not only visual pollution but also serious public health risks. Diseases linked to waste accumulation, such as respiratory infections and gastrointestinal illnesses, disproportionately affect vulnerable communities, exacerbating existing health inequalities.⁷³

An alarming trend is the rising generation of plastic waste, particularly in densely-populated urban centres where consumption habits drive high levels of single-use plastics in coastal areas.⁷⁴ The majority of these cities struggle with low recycling rates, often due to a lack of adequate facilities and public infrastructure dedicated to sorting and processing recyclable materials.⁷⁵ Informal waste management systems, which often rely on scavenging and rudimentary methods of disposal, dominate the landscape.⁷⁶ This lack of formal systems not only hinders recycling efforts but also poses additional risks, as many recyclables are not processed properly.⁷⁷

Electronic waste, or e-waste, presents another layer of complexity in environmental waste management.⁷⁸ Discarded electronics, which contain hazardous materials such as lead and mercury, frequently end up in landfills without proper treatment.⁷⁹ Vulnerable communities, often located near these disposal sites, face significant health risks from exposure to toxic substances, which can lead to long-term health complications.⁸⁰ Alongside this, inadequate funding for healthcare systems, insufficient training and a lack of awareness about policies and legislation for managing medical waste have resulted in increased

72 NEPAD 'What a waste: innovations in Africa's waste material management' 19 July 2021, <https://www.nepad.org/blog/what-waste-innovations-africas-waste-material-management> (accessed 30 October 2024).

73 Chapman & Ahmed (n 31).

74 World Bank *Plastic pollution in coastal West Africa* (2023), <https://documents1.worldbank.org/curated/en/099025507112355521/pdf/IDU0fcd59fba00cfao4ae109c6801aea6f2c8918.pdf> (accessed 30 October 2024).

75 As above; Z Sadan & L de Kock 'Plastic pollution in Africa: identifying policy gaps and opportunities' (2021), WWF South Africa, Cape Town, South Africa, https://wwfafrica.awsassets.panda.org/downloads/wwf_plastic_pollution.pdf (accessed 30 October 2024).

76 OO Oguntoyinbo 'Informal waste management system in Nigeria and barriers to an inclusive modern waste management system: a review' (2012) 126 *Public Health* 441-447.

77 JM Chisholm and others 'Sustainable waste management of medical waste in African developing countries: a narrative review' (2021) 39 *Waste Management and Research* 1149-1163.

78 LS Ankit and others 'Electronic waste and their leachates impact on human health and environment: global ecological threat and management' (2021) 24 *Environmental Technology and Innovation* 102049,

79 World Health Organisation 'Electronic waste (e-waste)' 1 October 2024, [https://www.who.int/news-room/fact-sheets/detail/electronic-waste-\(e-waste\)](https://www.who.int/news-room/fact-sheets/detail/electronic-waste-(e-waste)) (accessed 30 October 2024).

80 M Vrijheid 'Health effects of residence near hazardous waste landfill sites: a review of epidemiologic literature' (2000) 1 *Environmental Health Perspectives* 101.

improper handling of waste in hospitals, healthcare facilities, and the transportation and storage of medical waste.⁸¹

Moreover, transboundary waste issues in Africa are increasingly problematic, as many countries across the continent face illegal dumping and trafficking of hazardous waste, including e-waste and toxic materials, primarily from more industrialised countries.⁸²

3.2.1 Legal and policy interventions

Some efforts have been made at the regional level to control harmful waste, especially hazardous transboundary waste management.⁸³ The Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa (Bamako Convention) is one of the most significant instruments in this respect.⁸⁴ The Bamako Convention is an agreement aimed at addressing the environmental challenges related to hazardous waste in Africa.⁸⁵ The Bamako Convention was created in response to article 11 of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel Convention), which enjoins state parties to engage in bilateral, regional and multilateral agreements on hazardous waste to further the Basel Convention's goals. The Basel Convention's inability to prevent the transfer of hazardous waste to less developed countries (LDCs) and the discovery that numerous developed countries were exporting toxic garbage to Africa served as the impetus for the Bamako Convention. The need for the Convention was strengthened following several prominent cases, such as the 1988 Koko incident, when a small fishing town in Southern Nigeria was the site of an unlawful disposal of nearly 2 000 drums, bags and containers containing hazardous wastes, including polychlorinated biphenyls (PCBs), a highly carcinogenic chemical compound, by Italian businesses.⁸⁶ The vendor stated that the garbage would help poor farmers as fertiliser, but it ended up being a nightmare.

81 J Vidal 'Toxic e-waste dumped in poor nations, says United Nations' *Our World* 16 December 2013, <https://ourworld.unu.edu/en/toxic-e-waste-dumped-in-poor-nations-says-united-nations> (accessed 30 October 2024).

82 J Clapp 'Africa, NGOs, and the international toxic waste trade' (1994) 3 *Journal of Environment and Development* 17-46.

83 IUCN ELC 'UNEP register of international treaties and other agreements in the field of the environment, 1996' 2005, <https://www.ecolex.org/details/treaty/bamako-convention-on-the-ban-of-the-import-into-africa-and-the-control-of-transboundary-movement-and-management-of-hazardous-wastes-within-africa-tre-001104/> (accessed 30 October 2024).

84 Full text available at https://au.int/sites/default/files/treaties/7774-treaty-0015_-_bamako_convention_on_hazardous_wastes_e.pdf (accessed 30 October 2024).

85 OC Ruppel 'Environmental law and policy in the African Union' in OC Ruppel & KR Ruppel-Schlichting (eds) *Environmental law and policy in Namibia* (2013) 133.

86 JO Ihonybere 'The state and environmental degradation in Nigeria: a study of the 1988 toxic waste dump in Koko' (1994-95) 23 *Journal of Environmental Systems* 207-227.

Essentially, the Bamako Convention prohibits the import of hazardous waste into Africa, regulates the transboundary movement of such waste, and establishes guidelines for the management and disposal of hazardous waste in Africa, except for pollutants from ship discharges. Hazardous wastes are defined under the Convention as hazardous substances that are prohibited, cancelled or refused registration by government regulatory action for reasons related to health or the environment. Article 2 of the Convention also addresses radioactive wastes. Legislation designating and classifying hazardous wastes not previously included in the Convention will be enacted by the parties, according to article 3. Article 4 requires parties to take preventive measures with regard to waste generation and to implement a ban on the import of hazardous waste as well as the dumping of hazardous waste in internal and maritime seas. Every party shall also refrain from exporting hazardous wastes to states that have made such imports illegal by law or international agreement, or if it has reasonable grounds to suspect that the wastes in question cannot be managed in an environmentally-sound manner.

In order to report and take action regarding the transboundary transport of hazardous wastes, members are required to set up monitoring and regulating bodies (articles 5, 6, 7, 8 and 9). Parties are to also share information on hazardous waste events as well as strategies for resolving the issues that have been discovered (article 13).

This Convention is comprehensive for its objective and targeted purpose. By implementing the Convention, African countries can safeguard their environments and protect their populations from the risks associated with hazardous waste. This framework, if properly implemented and adhered to, can also contribute to a cleaner and healthier environment in Africa by preventing the influx of harmful substances and ensuring proper management of hazardous waste on the continent. Through the directive of this Convention, African countries can develop national legislation and enforcement mechanisms to ensure the safe handling, transportation and treatment of hazardous waste.

This regional cooperation also strengthens capacity building, technical assistance programmes and knowledge exchange to enhance Africa's ability to effectively manage and regulate hazardous waste. By implementing effective regulations and enforcement mechanisms, under the directives of this Convention, African countries can safeguard their environments and protect the health of their populations from the harmful impacts of hazardous waste.

In Africa, other measures have been implemented to regulate the management and disposal of specific waste. The Abidjan Convention, officially recognised as the Convention for Cooperation in the Protection and Development of the Marine and Coastal Environment of the West and Central African Region, serves as a vital framework designed to tackle a variety of marine and coastal environmental issues,

with a significant focus on the growing crisis of plastic pollution.⁸⁷ This wide-ranging agreement fosters a collaborative approach to the sustainable management of marine resources, highlighting the urgent necessity for legally-binding measures to effectively combat plastic waste and its detrimental effects on marine biodiversity and ecosystems. In response to escalating concerns regarding plastic pollution in coastal regions, the Convention is crucial for addressing the transboundary nature of marine pollution, which often requires collective action and shared responsibilities. Furthermore, the Abidjan Convention encourages member states to develop robust national action plans tailored to their specific environmental challenges, ensuring that these plans include effective strategies for waste management, reduction and recycling.

In addition to promoting national initiatives, the Convention facilitates the exchange of best practices among countries. This collaborative sharing of successful strategies is essential for improving waste management approaches and fostering innovation in combating plastic pollution. By advocating stricter regulatory frameworks and collective action, the Abidjan Convention plays an instrumental role in bolstering the global fight against plastic pollution, particularly in the vulnerable coastal regions of West and Central Africa, which are increasingly exposed to the adverse impacts of improperly-managed plastic waste.

Africa's nuclear weapon-free zone⁸⁸ was established by the African Nuclear-Weapon-Free Zone Treaty, also referred to as the Pelindaba Treaty.⁸⁹ The Treaty effectively prohibits the development, production, testing, stockpiling, acquisition, custody, control, or stationing of nuclear weapons in addition to the radioactive waste disposal ban.⁹⁰ The treaty also bans treaty parties from attacking any nuclear sites in the zone and mandates that they uphold the strictest physical security guidelines for nuclear materials, facilities and equipment, all of which may only be utilised for peaceful reasons.

It takes the environment into account by requiring state parties to comply with the measures outlined in the Bamako Convention and not to take any action to assist or encourage the dumping of radioactive wastes and other radioactive matter anywhere within the African nuclear weapon-free zone.

One important regional initiative aimed at addressing the burgeoning issue of electronic waste is the African Union's Electronic Waste Management Plan (EWMP). This comprehensive strategy is designed to tackle the increasing challenges associated with e-waste

87 Full text at https://apps1.unep.org/resolutions/uploads/1981-_convention-west_and_central_africa_region.pdf (accessed 30 October 2024).

88 For the purpose of the Treaty and its Protocols, 'African nuclear-weapon-free zone' means the territory of the continent of Africa, island states members of the OAU and all islands considered by the OAU in its resolutions to be part of Africa.

89 Full text at <https://www.peaceau.org/uploads/treaty-en-african-nuclear-weapon-free-zone.pdf> (accessed 30 October 2024).

90 Art 3 Pelindaba Treaty.

across the continent, which poses significant risks to both the environment and public health.⁹¹ The EWMP encourages member states to establish and enforce national laws and regulations tailored specifically to e-waste management. Such regulatory frameworks are crucial for promoting responsible disposal and effective recycling practices. In addition, the plan emphasises the importance of maximising the recovery of valuable materials found in e-waste, such as metals and rare earth elements, which can contribute to sustainable economic growth. Furthermore, the EWMP advocates the creation of eco-efficient and sustainable business models within the e-waste sector. The plan also underscores the necessity of considering the social implications of e-waste management strategies, ensuring that local contexts and community needs are taken into account. Capacity building is another key component of the EWMP, which aims to enhance knowledge sharing and communication among stakeholders. The EWMP also identifies best practices for recycling e-waste, highlighting the use of innovative, environmentally-friendly technologies.

In November 2019 the African Ministerial Conference on Environment convened and adopted the Durban Declaration, marking a significant milestone as the first comprehensive continent-wide policy dedicated to fostering support for resource recovery and the principles of a circular economy.⁹² This Declaration aims to significantly mitigate waste production and environmental degradation by promoting practices such as reusing, repairing and recycling materials and products across Africa.

At the sub-regional level, the Environmental Action Plan (EAP) for the years 2020 to 2026 has been developed with considerable backing from the USAID-funded West Africa Biodiversity and Climate Change (WABICC) Project.⁹³ This action plan is crafted to address emerging environmental issues and current trends in management practices. It emphasises the urgent need to confront climate change while conserving the region's natural capital, which includes essential resources such as forests, wildlife and their habitats, as well as protecting vital soil and water resources. Additionally, the EAP aims to tackle pressing concerns such as pollution, particularly the challenge posed by plastic waste, as well as hazardous chemicals and waste management.

91 African union 'Electronic Waste (E-Waste) Management Plan and Guidelines – APRIL 2023', https://au.int/sites/default/files/documents/42723-doc-AUC_E-Waste_Management_Plan_EWMP_BIASHARA_P180117_April_2023.pdf (accessed 30 October 2024).

92 LLSd, SDG Knowledge Hub 'In Durban Declaration, African ministers seek action for sustainability and prosperity', <https://sdg.iisd.org/news/in-durban-declaration-african-ministers-seek-action-for-sustainability-and-prosperity/> (accessed 30 October 2024).

93 ECOWAS Environmental Action Plan 2020-2026 March 2020, https://ecowap.ecowas.int/media/ecowap/file_document/2020_ECOWAS_ECOWAS_ENVIRONMENTAL_ACTION_PLAN_Final_Version_-_ENG.pdf (accessed 30 October 2024).

By adhering to the regulations outlined in these frameworks, African nations can significantly reduce the risks associated with hazardous waste, ultimately safeguarding the health of their populations and protecting vital natural resources.

Although effective regulation of waste management is a crucial aspect of environmental protection in Africa and a means of securing the rights of African citizens, the successful implementation of these waste management strategies is often undermined by several challenges, including inadequate waste disposal systems, outdated technological equipment and insufficient management skills in urban areas.⁹⁴ These deficiencies coexist with weak strategic, institutional and organisational structures, despite the existence of robust legal frameworks.⁹⁵ Moreover, African nations vary greatly in terms of economic development, institutional capacity and access to environmental resources, creating challenges for uniform practical and policy implementation across diverse regions. Issues such as corruption and a lack of accountability in waste management practices can lead to the misallocation of resources, ineffective service delivery, and poor enforcement of regulations – including those governing the interregional cross-border trade of plastic waste.

In this context, the Bamako Convention, which was established to control and reduce the transboundary movement of hazardous waste, faces significant challenges due to its inconsistent enforcement. This lack of uniformity results in loopholes that permit the ongoing illicit trade of hazardous materials. To effectively address these complex issues, there is a pressing need for stronger regional cooperation, stricter enforcement of existing international agreements, the establishment of enhanced monitoring systems, and comprehensive public awareness campaigns aimed at reducing waste generation and promoting responsible disposal practices.

Joint action thus is essential not only to combat plastic pollution, but also to create a unified market characterised by high environmental standards and legal certainty for businesses operating in the region. This concerted effort can facilitate a more sustainable approach to waste management while fostering economic growth and environmental stewardship across Africa.

To effectively tackle these lingering waste management issues, African nations must also adopt and implement comprehensive waste management policies tailored to the unique challenges they face. Investment in sustainable waste management technologies is crucial, including the development of efficient waste collection and sorting systems.

94 JK Debrah, & GK Teye & MAP Dinis 'Barriers and challenges to waste management hindering the circular economy in sub-Saharan Africa' (2022) 6 *Urban Science* 57; JK Debrah, DG Vidal & MAP Dinis 'Raising awareness on solid waste management through formal education for sustainability: a developing countries evidence review' (2021) 6 *Recycling* 6.

95 As above; L Godfrey and others 'Solid waste management in Africa: governance failure or development opportunity?' in N Edomah (ed) *Regional development in Africa* (2020) 1.

Following its environmental obligations and commitment, governments and organisations should promote recycling initiatives that engage local communities and create awareness around the importance of reducing waste and recycling. Public education campaigns that highlight the significance of environmental stewardship are essential in fostering a culture of sustainability. By encouraging individual and collective responsibility for waste generation and disposal, African nations can work towards creating healthier urban environments, protecting public health, and mitigating the impact of waste on the environment. In doing so, they not only address current environmental challenges but also lay the groundwork for a more sustainable future.

3.3 Biodiversity loss

Biodiversity loss in Africa poses a significant environmental challenge, driven by factors such as habitat destruction, climate change, poaching, invasive species and unsustainable land use practices.⁹⁶ The continent is home to a remarkable array of flora and fauna, many of which are endemic, but rapid urbanisation, agricultural expansion and deforestation threaten these ecosystems.⁹⁷ This decline in biodiversity undermines essential ecosystem services, including soil fertility, water purification and climate regulation, which are crucial for the livelihoods of millions of people.⁹⁸ Moreover, the loss of species can destabilise ecosystems, leading to cascading effects that further hinder conservation efforts and exacerbate human-wildlife conflicts. To tackle this challenge, Africa requires integrated conservation strategies that promote sustainable development, habitat restoration and community involvement, while also enhancing legal protections for vulnerable species and ecosystems.

3.3.1 Legal and policy measures

African nations came together in Algiers, Algeria, in 1968 to sign the African Convention on the Conservation of Nature and Natural Resources, usually referred to as the Algiers Convention. African leaders, in recognition that soil, water, flora and faunal resources constitute a capital of vital importance to mankind, agreed 'to harness the natural and human resources of the African continent for the total

96 UNEP-WCMC *The state of biodiversity in Africa: a mid-term review of progress towards the Aichi targets* (UNEP-WCMC).

97 As above; SP Ariori & P Ozer 'Development of forest resources in Sudano-Sahelian West Africa over the last 50 Years' (2005) 29 *Geo-Eco-Trop* 61-68.

98 World Health Organisation 'Climate change and health', <https://www.who.int/teams/environment-climate-change-and-health/climate-change-and-health/biodiversity> (accessed 30 October 2024); World Health Organisation 'Biodiversity and health' 3 June 2015, <https://www.who.int/news-room/fact-sheets/detail/biodiversity-and-health#:~:text=Biodiversity%20loss%20can%20have%20significant%20direct%20human,may%20even%20cause%20or%20exacerbate%20political%20conflict> (accessed 30 October 2024).

advancement of our peoples in spheres of human endeavour'.⁹⁹ In this regard, they adopted the African Convention¹⁰⁰ along with a list of protected species (Class A and Class B) in Algiers, Algeria on 15 September 1968. The Algiers Convention superseded the Convention Relative to the Preservation of Fauna and Flora in Their Natural State of 1933 but has been replaced by the 2003 African Convention on Conservation of Nature and Natural Resources (revised), in line with global and regional instruments.

The revised 2003 Convention focuses on three key areas, namely, the conservation and management of protected areas; the preservation of endangered species; and the promotion of sustainable development practices. The stated objective of the Convention is to improve environmental protection; encourage resource conservation and sustainable use; and to harmonise and coordinate policies in various areas in order to achieve development policies and programmes that are socially, economically and ecologically sound.¹⁰¹

The Convention emphasises the need to balance conservation efforts with the social and economic needs of local communities.¹⁰² It calls for the establishment of protected areas to safeguard ecosystems and biodiversity, and encourages the sustainable use of natural resources to support economic development. By addressing these issues, the Convention seeks to promote long-term environmental sustainability and ensure the protection of Africa's natural heritage for future generations.

This important Convention serves as a means to utilise Africa's abundant natural and human resources for the advancement of its people. The Convention, among other issues, acknowledged the importance of natural resources from an economic, nutritional, scientific, educational, cultural and aesthetic point of view, and describe the dangers that threaten some of these irreplaceable assets, while also acknowledging that the utilisation of the natural resources must aim at satisfying the needs of man according to the carrying capacity of the environment. Following this, the Convention committed parties and stakeholders to undertake individual and joint action for the conservation, utilisation and development of the natural assets by establishing and maintaining their rational utilisation for the present and future welfare of mankind.

99 African Union 'African Convention on the Conservation of Nature and Natural Resources', <https://faolex.fao.org/docs/pdf/mul45449.pdf> (accessed 30 October 2024).

100 CAB/LEG/24.1, https://au.int/sites/default/files/treaties/7763-treaty-0003_-_african_convention_on_the_conservation_of_nature_and_natural_resources_e.pdf (accessed 30 October 2024).

101 Art II African Union Convention (n 100).

102 As above.

The Phyto-Sanitary Convention for Africa is another important framework that contributes to the conservation of biodiversity and natural resources. It was adopted in 1967, making it one of the earliest legislations on environmental and agricultural protection.¹⁰³ Plant pests have become increasingly adept at migrating across borders, a phenomenon that is accelerated by climate change, heightened international travel and expanding trade networks.¹⁰⁴ These pests quickly adapt to new environments, posing significant challenges to agricultural systems.¹⁰⁵ As a result, millions of people are pushed into food insecurity when these pests damage vital crops and disrupt wild vegetation.¹⁰⁶ This not only threatens food supplies but also negatively impacts biodiversity and the livelihoods of both commercial and small-holder farmers, many of whom rely on healthy crops for their income and sustenance.¹⁰⁷

Plant pests can be controlled once they become established, but doing so is difficult and costly. Proactive alertness and mitigation are essential. Making certain improvements to the African agricultural sector, such as strong pest early warning and surveillance systems, increasing the technical proficiency of phytosanitary staff, and improving the efficiency of phytosanitary infrastructure, will increase crop yields, foster socio-economic growth, and facilitate the sustainable trade of agricultural products both inside and outside Africa. The Phyto-Sanitary Convention for Africa provides a timely opportunity to support the attainment of these goals. While it is possible to manage and control plant pests once they establish themselves, the process can be exceptionally complicated and costly. Therefore, a proactive approach to pest management is critical. The Convention aims to prevent the spread of diseases, insect pests and other threats to plants throughout all of Africa; to get rid of or manage these; and to stop them from spreading to other nearby territories.¹⁰⁸ Article III of the Convention makes provision for protective measures.

While this measure is important, the regional partnership to combat harmful pests is challenged by the lack of sophisticated technological know-how and skills for the development of robust early warning systems that can detect and anticipate pest threats before they become widespread, and phytosanitary infrastructure necessary for pest control and management. Implementing effective control

103 African Union 'Treaties', <https://au.int/en/treaties/1160> (accessed 30 October 2024).

104 S Skendžić and others 'The impact of climate change on agricultural insect pests' (2021) 12 *Insects* 440; FAO 'Climate-related transboundary pests and diseases', <http://www.fao.org/3/a-ai785e.pdf> (accessed 30 October 2024).

105 BB Lin 'Resilience in agriculture through crop diversification: adaptive management for environmental change' (2011) 61 *BioScience* 183-193.

106 As above; DM Rizzo and others 'Plant health and its effects on food safety and security in a One Health framework: four case studies' (2021) 3 *One Health Outlook* 1.

107 As above.

108 OAU 'Phyto-Sanitary Convention for Africa', CAB/LEG/24.4/11, https://au.int/sites/default/files/treaties/7762-treaty-0002_-_phyto-sanitary_convention_for_africa_e.pdf (accessed 30 October 2024).

measures is often hindered by a lack of resources, knowledge and infrastructure.

Therefore, there is a need to enhance the technical skills and expertise of phytosanitary staff across the continent. Training and education in pest management practices can empower these individuals to better identify and respond to pest outbreaks. Additionally, investing in the efficiency of phytosanitary infrastructure is essential for effective monitoring and control efforts.

The sub-regional Abidjan Convention for Co-operation in the Protection and Development of the Marine and Coastal Environment of the West and Central African Region and the Protocol concerning Co-operation in Combating Pollution in Cases of Emergency aims to address the challenges faced by countries in protecting and developing their marine (biodiversity) and coastal environment.¹⁰⁹ The Convention recognises the importance of safeguarding this environment for sustainable development, economic growth and the well-being of the region's population.¹¹⁰ It seeks to promote regional cooperation and coordination among member states to effectively address marine pollution and other environmental threats. According to article 3 of the Convention,¹¹¹ the West and Central African maritime and coastal environments may be protected by bilateral or multilateral agreements, including regional or sub-regional agreements between the contracting parties in the region, provided that these agreements are compliant with international law and the Convention. To prevent, reduce, combat and control pollution of the Convention area and to ensure sound environmental management of natural resources, the contracting parties shall, individually or jointly, as the case may be, take all appropriate measures in accordance with the provisions of the Convention and its protocols in force to which they are parties.¹¹² They shall comply with its provisions using the best practical means at their disposal and in accordance with their capacities.

The Protocol concerning Co-operation in Combating Pollution in Cases of Emergency, which is part of the Convention, specifically aims at providing a framework for coordinated action and response to pollution incidents in emergencies, and contingency planning. By establishing clear roles and responsibilities, the Convention and Protocol strive to prevent and reduce pollution, improve emergency

109 United Nations Environment Programme Nairobi Convention for Cooperation in the Protection and Development of the Marine and Coastal Environment of the West and Central African Region, Protocol Concerning Cooperation in Combating Pollution in Cases of Emergency (1981).

110 IJ Adewumi, JL Suárez de Vivero & A Iglesias-Campos 'The salient dynamics of cross-border ocean governance in a regional setting: an evaluation of ocean governance systems and institutional frameworks in the Guinea current large marine ecosystem' (2022) 8 *Frontiers in Marine Science* 1777.

111 Full text at <https://wedocs.unep.org/bitstream/handle/20.500.11822/36241/AC.pdf?sequence=3&isAllowed=y#:~:text=The%20Abidjan%20Convention%20is%20a,the%20marine%20and%20coastal%20areas.&text=ships%2C%20dumping%2C%20land%20based,from%20or%20through%20the%20atmosphere> (accessed 30 October 2024).

112 Art 4.

response capabilities, and promote the rehabilitation and restoration of affected areas. Significantly, the Convention and Protocol also provide a platform for member states to share experiences, achievements and challenges in the implementation of these measures, as well as to explore future prospects for collaboration in protecting and developing the marine and coastal environment of the region. It is also worth noting that many African countries are parties to the UN's Convention on Biological Diversity (CBD) which provide complementary measures for biodiversity conservation, protection and control.

Other regional initiatives, such as the AU Agenda 2063 and The Great Green Wall, have made significant strides in raising awareness and fostering collaborative efforts for the protection of Africa's rich biodiversity.

In spite of these legal and policy measures, monitoring, enforcement and governance challenges in implementing biodiversity conventions and initiatives in Africa undermine their effectiveness. Many of these challenges are complex and multifaceted, including weak institutional capacity and coordination; fragmented governance structures across African countries and national implementation authorities; limited capacity; insufficient technical expertise; human resources; and financial support to effectively implement biodiversity conservation; and inadequate political will to pursue long-term environmental sustainability measures.

Addressing the myriad challenges facing biodiversity in Africa necessitates a comprehensive and multifaceted strategy. This strategy should encompass several critical elements, including the fortification of institutions dedicated to environmental protection; the enhancement of law enforcement capabilities to combat poaching and illegal resource exploitation; and the establishment of adequate financing mechanisms to support conservation initiatives.

Furthermore, fostering meaningful stakeholder engagement is paramount, ensuring that local communities, indigenous populations and various interest groups are actively involved in decision-making processes. This participatory approach not only promotes transparency but also enhances the effectiveness of conservation efforts through shared responsibility and local knowledge.

Building robust political will is also essential in the successful outcome of the available frameworks, as it lays the foundation for sustained commitment to biodiversity conservation. African countries must prioritise the integration of biodiversity conservation into broader sustainable development agendas, recognising its intrinsic value and vital role in supporting livelihoods, ecosystems and resilience to climate change. Moreover, the adoption of inclusive governance models is crucial, as these frameworks encourage collaboration across different sectors and levels of government, allowing for the pooling of resources and expertise. Finally, fostering greater regional and international cooperation is imperative for tackling transboundary challenges, sharing best practices, and mobilising collective action towards the preservation of Africa's rich biodiversity. By embracing

these comprehensive strategies, African nations can advance towards a more sustainable and equitable future.

4 ENFORCING COMPLIANCE TO EXISTING FRAMEWORKS AND GUARANTEEING ENVIRONMENTAL JUSTICE

Can states be held liable for their environmental obligations under binding treaties? The jurisprudence of the African Court appears to suggest that states have an enforceable obligation to respect, promote and fulfil their duties in environmental frameworks and to remedy environmental rights violations in the context of human rights.

A case in reference is the Côte d'Ivoire disaster concerning a load of highly toxic waste that was offloaded in Abidjan in 2006, leading to the death of over 17 people and affecting the health of many. In the ensuing case of *Ligue Ivoirienne des Droits de l'Homme (Lidho) & Others v Côte d'Ivoire*,¹¹³ the applicants asserted that the human rights of numerous victims were infringed due to the dumping of toxic waste in Abidjan, which also resulted in significant environmental damage, particularly to the ground water. In response, the African Court carefully examined the claim and determined that the government bore responsibility for failing to safeguard the health, lives and environment of its citizens when it permitted a third party company to engage in the hazardous act of waste disposal. The Court issued several directives against the state, including an order for the government to undertake legislative reforms aimed at enforcing a comprehensive ban on the importation and disposal of hazardous waste. This was to be done in alignment with various international conventions previously ratified by the state.

The African Court was invited to examine the binding obligations to MEAs when the government argued that the 2003 Algiers Convention on the Conservation of Nature and Natural Resources did not constitute a binding 'human rights instrument'.¹¹⁴ Had the Court accepted this argument, it would have significantly diminished the practical application of the Convention in similar cases in the future or even affected the legal status of other MEAs. However, the judges in their 2013 decision took a progressive stance by articulating that the Algiers Convention clearly demonstrated a commitment by participating states to act in ways that prevent detrimental impacts on the environment, particularly those arising from toxic and hazardous waste.¹¹⁵ When examined in conjunction with the African Charter, the Court concluded that state parties had willingly accepted responsibilities that ensured the protection and fulfilment of rights outlined in the African Charter.

113 Application 41/2016 Judgment 5 September 2023.

114 *Ligue Ivoirienne* (n 113) paras 29-31.

115 *Ligue Ivoirienne* (n 113) paras 32-40.

Accordingly,

[a] combined reading of these various provisions shows that, through the Algiers Convention, State Parties have signed up to obligations that guarantee the enjoyment of the rights provided for in Articles 16 and 24 of 14 the Charter, namely, the right to the enjoyment of the best attainable state of physical and mental health and the right to a general satisfactory environment conducive to development.¹¹⁶

This conclusion is important for several reasons. First, it enabled the Court to incorporate the provisions of the Algiers Convention into its deliberations and ultimately influenced its decisions regarding the case at hand. Second, it cemented the position of MEAs as a crucial tool in establishing liabilities and guaranteeing the right to a satisfactory environment. Third, the decision in this case reminds states and relevant authorities to be ‘mindful of the growing threat to human health’ and take proactive actions.¹¹⁷ On this point, the Court supported its position by further articulating the obligation of states in the Bamako Convention.¹¹⁸ The judges stressed that ‘the Bamako Convention that it behoves state parties, prevent the importation into their territory of toxic wastes whose impact on human life they should be aware of’.¹¹⁹ Furthermore, if such harmful waste is placed in its territory, it ‘has the obligation to act and limit and repair the harmful consequences on human life’.¹²⁰ Beyond finding that rights to life, health and environment were violated,¹²¹ the Court also took the time to establish that states must implement the rights guaranteed by the ‘Convention to which they subscribe’.¹²²

The *Ogiek* case against the Kenyan government,¹²³ presented before the African Court, represents another significant milestone in the recognition and protection of indigenous peoples’ rights, as well as environmental rights across the continent.¹²⁴ This landmark ruling highlighted the struggles of the Ogiek community, an indigenous group with a deep historical connection to the Mau forest in Kenya, who have faced ongoing eviction and land dispossession. The African Court’s decision not only affirmed their right to land and resources in the African Charter, but also emphasised the importance of preserving

116 *Ligue Ivoirienne* (n 113) para 39.

117 *Ligue Ivoirienne* (n 113) para 130.

118 As above.

119 *Ligue Ivoirienne* (n 113) para 137.

120 As above.

121 *Ligue Ivoirienne* (n 113) paras 133-135.

122 *Ligue Ivoirienne* (n 113) para 131.

123 African Court of Human and Peoples’ Rights (2017) *ACHPR v Kenya* Application 6/2012 Judgment dated 26 May 2017, ACtHPR, Arusha, Tanzania; African Court of Human and Peoples’ Rights (2021) *African Commission on Human and Peoples’ Rights v Kenya* Application 6/2012 Order (Procedure) 25 June 2021, ACtHPR, Arusha; African Court of Human and Peoples’ Rights 2022 *African Commission on Human and Peoples’ Rights v Kenya* Application 6/2012 Judgment (Reparations) 23 June 2022, ACtHPR, Arusha, Tanzania.

124 L Claridge & D Kobei ‘Protected areas, indigenous rights and land restitution: the *Ogiek* judgment of the African Court on Human and Peoples’ Rights and community land protection in Kenya’ (2023) 57 *Oryx* 313-324.

indigenous cultural practices and livelihoods that are intrinsically linked to their environment. This case has broader implications for environmental justice, as it underscores the necessity of integrating indigenous rights into national and international legal frameworks aimed at protecting natural resources and ecosystems.

In the comparative landmark case of *Kaliña and Lokono Peoples v Suriname*,¹²⁵ the Inter-American Court of Human Rights underscored the significance of upholding the rights of indigenous peoples and how this respect can positively influence environmental conservation efforts.¹²⁶ The Court articulated that recognising and protecting the rights of indigenous communities not only is a moral and legal obligation, but also essential for fostering sustainable environmental practices. Consequently, it emphasised that the rights of indigenous peoples should be viewed in conjunction with international environmental laws, positioning these frameworks as complementary rather than mutually exclusive. This perspective highlights the interconnectedness of human rights and environmental stewardship, underlining a holistic approach to both indigenous rights and conservation.¹²⁷

Environmental litigation has also gained positive ground in regional institutions.¹²⁸ In 2014 a significant ruling was made by the East African Court of Justice, which intervened to halt the Tanzanian government's plans to construct a road winding through the iconic Serengeti National Park.¹²⁹ This decision was based on extensive concerns regarding the potentially detrimental effects such development could have on the environment, including threats to wildlife migration patterns and natural ecosystems.¹³⁰ The Court's intervention was not an isolated incident but rather part of a broader trend toward strengthening environmental judicial protection across the African continent.¹³¹ Such rulings signify a pivotal shift in prioritising

125 Inter-American Court of Human Rights (IACtHR) (2013) *Case of the Kaliña and Lokono Peoples v Suriname* Judgment of 18 July 2013, IACtHR, San José, Costa Rica, corteidh.or.cr/docs/casos/articulos/seriec_309_ing.pdf (accessed 30 October 2024).

126 As above.

127 *Kaliña* (n 125) para 173.

128 Network for Greening the Financial System, 'Climate-related litigation: recent trends and developments' (2023), https://www.ngfs.net/sites/default/files/medias/documents/ngfs_report-on-climate-related-litigation-recent-trends-and-developments.pdf (accessed 7 December 2024).

129 *African Network for Animal Welfare (ANAW) v The Attorney General of the United Republic of Tanzania* Ref 9 of 2010, Judgment, East African Court of Justice at Arusha First Instance Div 64 Gun 20, 2014, <http://eacj.org/wp-content/uploads/2014/06/Judgement-Ref.-No.9-of-2010-Final.pdf> (accessed 30 October 2024).

130 The decision was affirmed by the Appellate Division of the EACJ which largely upheld that decision in July 2015, *Attorney General of the United Republic of Tanzania v African Network for Animal Welfare (ANAW)* Appeal 3 of 2014, Judgment, East African Court of Justice at Arusha App Div (29 July 2015), <http://eacj.org/?cases=the-attorney-general-of-the-united-republic-of-tanzania-vs-afri-can-net-work-for-animal-welfare> (accessed 30 October 2024).

131 JT Gathii 'Saving the Serengeti: Africa's new international judicial environmentalism' (2016) 16 *Chicago Journal of International Law* 386.

environmental conservation and underscore the growing recognition of the legal rights of nature and the importance of safeguarding critical habitats from unsustainable development practices.

Similarly, the ECOWAS Court found the Nigerian government responsible for abuses by oil companies operating within its territory, in the case of *Social-Economic Rights and Accountability Project (SERAP) v Federal Republic of Nigeria*.¹³² According to the Court, article 24 of the African Charter articulates a fundamental principle of environmental right that underscores the intrinsic link between a healthy environment and the overall well-being and progress of communities. In its ruling, the Court reinforced the importance of this principle by affirming that the environment is crucial for the survival and flourishing of every individual. The Court unequivocally stated that 'the quality of human life depends on the quality of the environment', highlighting the interconnectedness of environmental health and human development. Furthermore, the Court emphasised the responsibility of the state to ensure that those who inflict environmental harm, particularly through activities such as oil pollution, are held accountable. It specifically pointed out the necessity for the state to implement effective mechanisms to provide adequate reparation to those affected by environmental degradation. The Court also outlined Nigeria's obligations in this context, mandating the country to take 'additional and concrete measures aimed at preventing the occurrence of damage or ensuring accountability'. This includes not only addressing past harms, but also instituting proactive strategies to prevent future environmental damage.

It is important to highlight the Court's articulation regarding the responsibilities outlined in article 24 of the African Charter. The Court specifies that the duty imposed by this article encompasses both an 'obligation of attitude' and an 'obligation of result'. This means that not only must the state adopt a proactive and positive approach towards environmental protection, but it is also required to achieve tangible results through its actions. In this manner, article 24 requires that the state implement a range of legislative or other measures specifically designed to give effect to the right to a healthy environment. These measures must be effectively carried out to foster accountability among various stakeholders and to ensure that victims of environmental harm receive adequate reparations. This comprehensive understanding underscores the necessity for the state to be active in its role, ensuring that laws and actions translate into meaningful protection and restoration of the environment.

The African Commission has also lent its voice to environmental issues by providing important jurisprudence and leading the pace in guaranteeing the right to a healthy environment in other cases. The Commission determined in *SERAC*¹³³ that the Ogoni people had

132 *Registered Trustees of the Socio-Economic Rights and Accountability Project (SERAP) v Federal Republic of Nigeria* Preliminary ruling ECW/CCJ/APP/07/10, 10 December 2010.

133 *SERAC* (n 26).

experienced serious violations of their fundamental rights, specifically their right to health as outlined in article 16, and their right to a satisfactory environment conducive to development as specified in article 24 of the African Charter.

Although at the time of writing the regional and sub-regional judicial bodies are yet to specifically entertain issues of climate change,¹³⁴ it is only a matter of time before they would touch on these significant issues, especially in holding states, corporations and private individuals accountable for contributing to climate change crises or tackling rising global warming.

5 CONCLUSION: PROSPECTS FOR AFRICA'S ENVIRONMENTAL CONTROL SYSTEM

With a growing recognition of the importance of environmental protection in Africa, there are promising prospects for the future of African regional environmental law. Efforts must be made to strengthen existing legal frameworks and enhance regional cooperation to address emerging environmental challenges. This includes exploring innovative solutions to mitigate climate change, promote sustainable development and protect biodiversity. Other pertinent areas for attention include addressing pollution, ensuring effective waste management, preventing or restoring land degradation, and so forth. In addition, there is a need to focus on enhancing enforcement and compliance mechanisms to ensure the effective implementation of environmental laws. Furthermore, increasing awareness and education about environmental issues and promoting public participation in decision-making processes are crucial for the success of regional environmental initiatives. If adequate measures are put in place, the future prospects of African regional environmental law to foster sustainable development and preserve the continent's natural resources for generations to come will be clearer and better.

Implementing robust environmental regulations and adhering to sustainable trade standards are also pivotal in this transition. Many of the environmental issues confronting the continent transcend national boundaries and, thus, enhanced regional cooperation and support, and technical and financial knowledge is required to effectively address these. By taking these critical actions collectively, African countries can pave the way for a sustainable future that not only addresses current ecological challenges but also safeguards the well-being of future generations.

134 Y Suedi & M Fall 'Climate change litigation before the African human rights system: prospects and pitfalls' (2024) 16 *Journal of Human Rights Practice* 146-159.